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agricultural organisations along the value chain**

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I look to the mountains; where will my help come from?
My help will come from the Lord, who made heaven and earth.
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Abstract

In a demand-driven global market, coffee quality needs to be observed from the perspective of consumers' priorities and preferences to find a balance between the provisions for producers and the expectations of customers. Quality tends to be defined from various dimensions to meet the demand of buyers. It goes beyond the physical and cupping qualities, with moral value and environmental concern becoming crucial features of the definition. The successful development of Fairtrade coffee demonstrates the changes in consumers' preferences, while farmers have to establish relevant cooperatives to enter the Fairtrade movement. To facilitate the establishment and to improve the management efficiency, Fairtrade farmers' cooperatives need to mobilise different resources at the local level. It is especially essential in an oligopolistic coffee market, like the situation in China.

Social capital is an important asset to facilitate the cooperation and related collective profit. A comprehensive utilisation of social capital can enhance the management and performance capacities of Fairtrade farmers' cooperatives. In this research, social capital is assumed to be rich in 'homogenous groups', which are usually small, cohesive and isolated groups. It represents a deeply felt identity with concerted action, while participatory negotiation and democratic decision-making can be performed in the federated system. The classification, identification and description of the 'homogeneous groups', the federated system and relevant representatives can provide constructive implications for the establishment and management of farmers' cooperatives. Moreover, the possible external support is analysed to benefit the certification process at the local level. To obtain the necessary information, a combination of different approaches was applied. A survey of 250 farmers in villages in South-western China was undertaken, followed by focus group discussions and semi-structured interviews. For macro-information about the agricultural policy and coffee industry, several interviews were made with key persons from the provincial agricultural ministry, local coffee guild and coffee institutes.

The results of the study show that the organisational integration between farmers' cooperatives and basic institutional authorities can facilitate access to local social capital and contribute to the promotion of Fairtrade certification in South-western China. While the family possesses the characteristics of a homogenous group and works as an effective operational unit, the federated system in the cooperative can be efficiently arranged in the institutional system of administration village and production group. With the external support of the coffee institutes, Fairtrade

certification can improve the technical capacity and self-governance consciousness of farmers' cooperatives to some extent. Although the economic influence of Fairtrade seems to be limited in an oligopolistic Chinese coffee market, relevant farmers' cooperatives generally have the suitable management capacity to offer coffee of suitable quality and obtain reasonable profits according to the requirements of the mainstream market. The meaning of Fairtrade is not just present in the business itself, but is also embodied in the competence improvement and network extension of farmers' cooperatives during the application and performance process of the certification.

Finally, more specific research on local social capital should be done in South-west China to gain further details focusing on a Fairtrade coffee market analysis. The establishment and management of relevant farmers' cooperatives would benefit greatly when the access to social capital and the control of coffee quality can be considered from the aspect of the whole value chain, especially based on the opinion of the consumers and the marketing strategy of Fairtrade certified products.

Kurzfassung

In einem nachfrageorientierten globalen Markt muss die Kaffeequalität aus Sicht der Konsumentenprioritäten und -präferenzen betrachtet werden, um ein Gleichgewicht zwischen den Herstelleranforderungen und Kundenerwartungen zu finden. Die Qualität wird dabei von verschiedenen Dimensionen bestimmt, um den Kundenansprüchen zu genügen. Es geht dabei über die physischen, technischen und sensorischen Qualitäten hinaus – moralische Werte und Umweltbewusstsein werden zu entscheidenden Merkmalen der Definition. Die veränderten Präferenzen der Verbraucher spiegeln sich in der erfolgreichen Entwicklung des Fairtrade-Kaffees wieder. Immer mehr Kleinbauern gründen entsprechende Genossenschaften, um an der Fairtrade-Bewegung teilzuhaben. Um die Gründung zu ermöglichen und Effizienz in der Verwaltung zu verbessern, müssen Fairtrade Bauern-Genossenschaften verschiedene Ressourcen auf lokaler Ebene mobilisieren. Dies ist besonders wichtig in einem oligopolistischen Kaffee-Markt wie in China.

Sozialkapital ist ein wichtiger Bestandteil, um Zusammenarbeit und den damit verbundenen kollektiven Gewinn zu ermöglichen. Eine umfassende Nutzung von Sozialkapital kann die Management- und Performance-Kapazitäten von Fairtrade-Bauern-Genossenschaften steigern. In der Forschung wird davon ausgegangen, dass Sozialkapital reich an "homogenen Gruppen" ist, die in der Regel kleine, zusammenhängende und isolierte Gruppen sind. Es stellt eine tief empfundene Identität mit abgestimmter Aktion dar, während partizipative Verhandlungen und demokratische Entscheidungsfindung in einem föderierten System durchgeführt werden. Die Klassifizierung, Kennzeichnung und Beschreibung der 'homogenen Gruppen', dem föderierten System und der relevanten Vertreter kann zielführende Konsequenzen für die Einrichtung und Verwaltung von Bauern-Genossenschaften bieten. Darüber hinaus wird eine mögliche externe Unterstützung analysiert, um den Zertifizierungsprozess auf lokaler Ebene zu erleichtern. Um die notwendigen Informationen zu erhalten, wurde eine Kombination verschiedener Ansätze verfolgt: eine Befragung von 250 Kleinbauern in den Dörfern im Südwesten Chinas, gefolgt von Gruppendiskussionen und semi-strukturierten Interviews. Um Makro-Informationen über die Agrarpolitik und Kaffee-Industrie zu erhalten, wurden Interviews mit Schlüsselpersonen aus dem Landwirtschaftsministerium der Provinz Yunnan, der lokalen Kaffee-Gilde und dem Kaffee-Institut durchgeführt.

Die Ergebnisse der Studie zeigen, dass die organisatorische Integration zwischen Bauern-Genossenschaften und institutionellen Behörden den Zugang zu lokalem Sozialkapital erleichtern und einen Beitrag zur Förderung der Fairtrade-Zertifizierung im Südwesten Chinas leisten kann. Während die Familie die Eigenschaft einer homogenen Gruppe besitzt und als effektive operative Einheit arbeitet, kann das föderierte System in der Genossenschaft effizient in das institutionelle System des Verwaltungsdorfs und der Produktionsgruppe eingeordnet werden. Mit der externen Unterstützung der Kaffeeinstitute, kann die Fairtrade-Zertifizierung die technische Kapazität und das Bewusstsein für Selbstverwaltung der Bauerngenossenschaften bis zu einem gewissen Grad verbessern. Obwohl der wirtschaftliche Einfluss von Fairtrade in einem oligopolistischen chinesischen Kaffeemarkt beschränkt zu sein scheint, scheinen relevante Bauerngenossenschaften die geeigneten Managementkapazitäten zu haben, um nach den Anforderungen des Mainstream-Markts Kaffee mit der richtigen Qualität anzubieten und einen angemessenen Gewinn zu erzielen. Die Bedeutung von Fairtrade ist nicht nur im Geschäftsstreben selbst vorhanden, sondern zeigt sich auch in der Kompetenz-Verbesserung und Netzwerk-Erweiterung der Bauern-Genossenschaften während des Anwendungs- und Leistungsprozesses der Zertifizierung.

Es sollte mehr Forschung auf lokaler Ebene in Südwest-China in Bezug auf Sozialkapital durchgeführt werden, um weitere Details unter Berücksichtigung des Fairtrade-Kaffee-Marktes zu erhalten. Die Einrichtung und Verwaltung der relevanten landwirtschaftlichen Genossenschaften könnte stark davon profitieren, wenn der Zugang zu Sozialkapital und die Kontrolle der Kaffeequalität unter Berücksichtigung der gesamten Wertschöpfungskette in Betracht gezogen wird, insbesondere der Meinung von Verbrauchern und der Marketingstrategie von Fairtrade-zertifizierten Produkten.

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1. Introduction

There is always a power behind them.
Only when farmers' cooperatives apply Fairtrade certification,
we can start our work.
Dr. Rüdiger Meyer
CEO FLO-CERT GmbH

Fairtrade certification coffee in China is a broad topic. Many factors have to be taken into consideration from different perspectives: from demand to supply, from certificate market to coffee industry and from the general environment in China to the specific research region. The entire certification process can only be performed when the local farmers' cooperative submits its application. The cooperative is the key to start the whole process. For Fairtrade certification, it is necessary to focus on the establishment and management of a suitable farmers' cooperative according to the requirements of Fairtrade and with regard to the agricultural situation, specifically of coffee in China. While the research objective is the investigation of the organisational structure for Fairtrade coffee cooperatives in rural areas, the empirical study is based on the example of Yunnan province, China. The study aims to classify local organisational levels, identify the group units and utilize their original resources and regulations to benefit a Fairtrade cooperative and provide constructive implications for its establishment and management in Southwestern China¹.

1.1 Chinese agricultural development situation

Organisations are influenced and formed by the political, economic and social circumstances. It is impossible to study the establishment and management of a Fairtrade farmers' cooperative without consideration of the Chinese agricultural background. Since relevant laws and policies are released to solve the dilemmas in agriculture, the recognition of predicaments can help to understand the inner logic of governmental development strategies. In China, the conflict between land and people is the main challenge for agricultural development (CHINESE COMMUNIST PARTY CENTRAL COMMITTEE 2008b). Per capita space of cultivated farmland is 0.093 hectare in China (MINISTRY OF LAND AND RESOURCES OF THE PEOPLE'S REPUBLIC OF CHINA 2005). Due to the small plots of land, it is difficult for farmers to efficiently allocate various production elements in

¹ While the agricultural development situation and coffee market are studied in the scale of the whole China, the research on coffee farming regions is focused on Yunnan, the only Arabica production province in South - western China.

their farming work, such as capital, human resources, land, market information and technology. Productivity is limited. Additionally, farmers can hardly maintain a stable income and protect their interests while facing the high competition and risks in the agricultural market. To improve farmers' livelihoods and achieve rural development, the Chinese government released a series of policies, regulations and laws to strategically guide farmers. Farmers' migration and systematization² are characterized and analyzed to reflect their development options.

Farmers' migration is considered as a long-term economic development strategy in China and was clearly regulated in the last three summaries of the 'National Economy and Social Development Five Year Plan'. It strongly affects the development of rural and urban regions and the relevant farmers' lives (CHEN AND YANG 2011; GTZ 2002; KNIGHT AND SONG 1999). When the economy is stable and enough jobs can be created, migration is able to effectively support economic development and reduce rural population density. Machines could possibly be used on a large scale to benefit agricultural productivity (HUANG 2001: 48; NIU 1999: 13; JIANG 1995: 29). However, the movement of many farmers could cause labor oversupply in the cities, especially in periods of economic downturn. Although the average urban income is higher and the rural-urban income gap is widening, there is no overwhelming evidence to prove that a steady income of migrant farmers is ensured and their quality of life is noticeably improved (LUO X. and ZHU 2008: 2; YANG H. 2009; GTZ 2002). In rural regions, migration may lead to a shortage of human resources and other socioeconomic problems, and hamper the agricultural development potential to a certain extent. In contrast to the farmers' migration is the trend for further development, which needs time to optimize all relevant factors in the process, such as the establishment of a social welfare system, improvement of education and household registration system, etc. (OECD 2010: 12-13; GTZ 2002). In the transition period, it is necessary to promote the systematization of the farmers to improve their livelihoods (LIU 2004: 68, CHENG 2003: 3-4 & ZHAO 1994: 70). This facilitates the efficient allocation of various production elements in the farming work, such as capital, human resources, land, market information and techniques. A farmers' association is one of its reflection types. A study of the

² Systematization refers to a process using different approaches to organize smallholders to enter the market and obtain reasonable benefit (HAN and LI 2003:18-20 and XIA 2008:21).

systematization aspect can possibly contribute to the research about Fairtrade farmers' cooperatives in China.

The systematization procedure in China is strongly related to the country's land policy and situation. The Household Responsibility System (HRS) started in 1978 brought land-use rights to rural households, providing more leeway for farmers to select crops and to market surplus production (ZWEIG 1997; KELLIHER 1992). The land distribution reform and relevant regulations motivate farmers and have a direct positive influence on grain productivity (LIN J. 1992:34; SICULAR 1995:1020). With the introduction of the HRS alone, millions of farmers were able to rapidly improve their quality of life and eliminate absolute poverty (DONALDSON 2007: 898). However, agricultural investments were reduced since urban development was emphasized by the central government at the end of the 1980s (WONG 1991: 691; OI 1989). In the 1990s, the positive effect caused by land reform gradually disappeared, while local governments had less economic capacity to support agricultural development (BRANDT *et al.* 2002:67; MEAD 2003:117; KHAN and RISKIN 2001).

Due to the HRS, individual households could make the final decisions and take the related responsibility. Farmers' motivation greatly increased; This had been constrained by the communist commune system. Meanwhile, however, the small and dispersed contracted land area limited agricultural productivity and reduced the level of mechanization in farming (KIPNIS 1997). The utilization of agricultural technology and the provision of human resources are also limited, as agriculture is family-based. In most China, production is mainly in small and scattered plots of land and carried out by members of rural households with severely constrained capital. Critics of de-collectivization lamented the potential loss of productivity caused by dividing communal land (HINTON 1991; DONG 1996: 915; LI *et al.* 1998: 63; BRAMALL 2004: 107).

The scattered, small and weak nature of household-based farming could possibly be changed by a suitable organisational model that could improve farmers' competitive capacity, save transaction costs, reduce market risks, achieve specialization and increase income (YU *et al.*, 2010: 63; BONUS 1986: 310-311). There are many organisational models in China. According to various promoters (SUN and YI 2009: 77; ZHANG and DONALDSON 2008: 24-25; ZHANG and WANG 2007: 12114; HAN and LI 2003: 18), they can be divided into four categories, namely 'Lead market' initiative, specialized market, farmers' association and others. All can be found in Yunnan, the

only Arabica coffee production province, and affect coffee farmers' livelihoods.

1.2 Oligopolistic coffee market and production in China

Yunnan produces over 98% of the Chinese coffee beans (AGRICULTURAL BUREAU OF YUNNAN 2008). Its main coffee market is domestic. In a market-oriented economy, demand is important for coffee production and the relevant farmers' livelihoods. The Chinese coffee market is not large but has good growth potential (EUROMONITOR INTERNATIONAL 2011: 28). In 2009, market size was about US\$ 1250 million (BUSINESS MONITOR INTERNATIONAL 2009). The market is dominated by instant coffee produced by Nestlé, Kraft and Hougood with over 87% market share (EUROMONITOR INTERNATIONAL 2011: 32 & 2010: 31). In the field of coffee shops, Starbucks has made great progress (STARBUCKS 2012a) and has gained an important position. Such big coffee companies have their own trade modes with Yunnan coffee farmers and their own quality requirements. To meet these demands, coffee farmers have to provide good quality coffee beans at a suitable price, in the required amount in good time at a suitable location (SIEBENBROCK 2010: 86). In the absence of a market information system and oligopolistic economics, it is difficult for coffee farmers to balance all production factors and make the right trade decisions. Therefore, they gain little residual value in the whole coffee value chain of the mainstream coffee market.

On the other hand, Yunnan has the potential to enter the specialty coffee market. Beside its great biodiversity and cultural diversity, it has unique environmental conditions for coffee farming. The Himalaya extends into the western part and the eastern part is protected from cold air masses by the high mountains of the Yunnan-Guizhou plateau (Figure 1). The unique geographic and climatic situation has a positive effect on coffee cup quality (CHEN, 2008: 412). To strengthen the confidence in product quality, various certificates can be used (SIEBENBROCK, 2010: 87). Due to the high quality management and trust basis provided by the certificates (EBEL, 2001: 139), the fragmented demand could possibly be united to form a niche market and attract stable customer groups to achieve necessary trade quantities. It is possible for Yunnan coffee to benefit from certificates, especially the Fairtrade certificate, in relation to social, economic and environmental issues.

Figure 1: Coffee producing areas, Yunnan province, China



Source: Blackmore and Keeley (2012)

1.3 Fair trade: a possible response?

The fair trade movement³ seeks to create more equitable commodity networks connecting socially and environmentally conscious consumers in the developed countries with marginalized farmers in the developing nations (RAYNOLDS 2002: 404; MURRAY *et al.* 2006: 180). To alleviate poverty, increase farmers' incomes and strengthen their position in the market, a more direct link is established to shorten the product value chain and skip the intermediates (FAIRTRADE FOUNDATION 2012b). In the fair trade movement there are five large active international initiatives in the consumer countries. Four of them are located in Europe, namely the World Fair trade Organisation (WFTO), the European Fair trade Association (EFTA), the Network of European World Shops (NEWS!) and Fairtrade Labelling Organisations International (FLO). As one of the most famous initiatives, FLO has significant representation and achieves remarkable

success in the market. Its Fairtrade certification is a typical example revealing the whole operational process. In this research, the Fairtrade certificate of FLO is chosen to regulate the farmers' cooperatives in Yunnan, China. Its certification process and related requirements are the crucial elements that formulate the structure and function of a cooperative.

A Fairtrade certificate is a credential product in the certification market; its social, economic and environmental principles give people a specific impression, comparable to conventional goods. Facing the current market challenges, it has its responses and adjustments that can probably affect the characteristics of the Fairtrade farmers' cooperatives in the developing countries. Furthermore, the certification market can vary greatly in different countries. Fairtrade certification and its cooperatives have to comply with local laws and relevant policies. It is necessary to provide a description of the Chinese certification market for the establishment of a Fairtrade farmers' cooperative.

As a kind of organisation, a cooperative is directly affected by various environmental conditions. Beside external factors, its internal relationship is crucial for its establishment and mainly reflected in the interaction between persons and organisation. From the perspective of psychology, the motivation of participation is particularly difficult to identify in the complex and inconsistent society, organisations and persons (ENDRUWEIT 2004: 245; HOEFERT 1994: 38). To increase certainty and explore the original sources, the social capital concept is introduced in this research. This focuses on human relationships and the related value, and can lead to better understanding for the establishment of a Fairtrade farmers' cooperative in Yunnan, China. In the empirical part of the research, the social capital concept is applied to observe the cooperation in various local collective groups.

1.4 The objectives, problems and assumptions of the research

The main objective in this research is to provide constructive implications for Fairtrade coffee farmers' cooperatives with respect to the local background in Yunnan, China. Therefore, the following research questions should be answered:

1. What is the situation of farmers, their cooperatives and related agricultural policies in China?

³ In the research, 'fair trade' means fair trade movement, while 'Fairtrade' refers to the certification of Fairtrade Labelling Organisations International (FLO).

2. What are the market conditions and the production program for the coffee industry in China?
3. What are the requirements of the fair trade movement, the Fairtrade certificate and the certification market?
4. What is the socio-economic situation in local villages from a social capital perspective?
5. How can a sustainable organisation mechanism suitable for Fairtrade principles be established?

Out of many local villages, BaiHuaLing administrative village in GoLiGong Mountain area (UNESCO world heritage) was selected as the field work region. Due to its rich biologically diverse resources and multi-ethnic background, a series of international and national development projects have been implemented. Reliable and consistent data in the reports of various projects offer a stable basis for the field work. Being located next to an international nature reserve and in the border area between Myanmar and China, the region's marginalization characteristic is favored by the Fairtrade concept and attractive to the market. Furthermore, it has a leading role in agricultural development at the regional level, due to its coffee plantations and superior quality products. The coffee of BaiHuaLing had a high score in the cup testing in Germany, which was established for 52 different coffee samples from the whole Yunnan province (CHEN 2008). The intentions of Fairtrade can be maximized establishment and management of relevant cooperatives are achieved. Beside its speciality, the village is typical of the mountainous area. Its physical, institutional and cultural variables can be found in many other villages. Its representation of the common characteristics of the region is significant.

The basic research assumption: social capital exists, is measurable and important for the establishment and sustainability of a Fairtrade certification. Proper utilization of local social capital can benefit not only performance efficiency but also the validity of governance in the association. The theoretical background of this thesis is OSTROM's description of social capital (2002). According to her theory, social capital is rich in 'homogenous groups', which are usually small, cohesive and isolated collective units. Participatory negotiation and decision-making can occur in these groups. Based on this, collective cooperation can be achieved in a delegation system. Therefore, a homogenous group is an important point in the social capital related research; the homogeneity, power allocation and organisational mechanism of the coffee grower groups and other local collective units are studied. The leaders within the homogenous groups are

identified. This is regarded as useful for the Fairtrade organisational mechanisms in the future. Finally, advice is provided for a local Fairtrade farmers' cooperative according to its principles, potential and limitations.

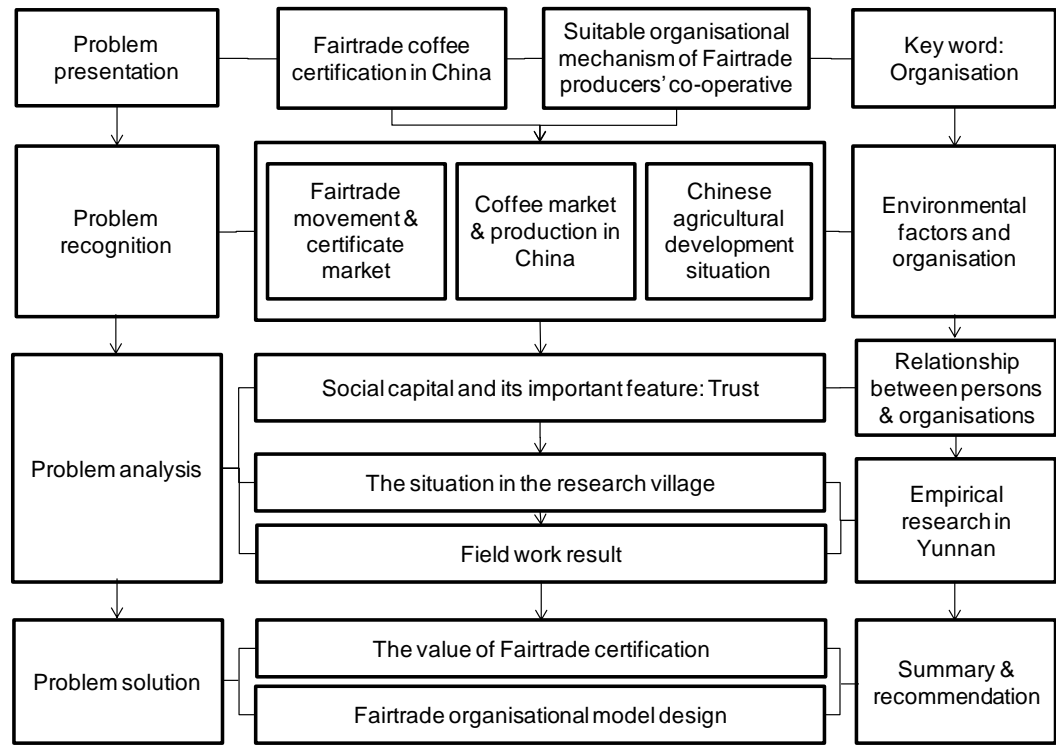
A combination of different approaches is applied. On the basis of a comprehensive literature review, a questionnaire is designed to identify the homogenous group. Furthermore, group discussions were performed in the village. Based on the group discussion, key persons (such as chairmen of villages, Farmer Environmental Protection Associations and Elderly Associations) were identified suitable for semi-structured interviews. In order to obtain more macro-information about the agricultural policy and coffee industry, several interviews were made with persons at the provincial level, e.g., officers from the provincial Agricultural Ministry, the secretary general of the Yunnan Coffee Association, and researchers from local coffee institutes.

The results of this research can contribute to the organisational set-up of a Fairtrade farmers' cooperative in Yunnan – based on the example of the BaiHuaLing village, representative of the villages in the mountain areas. Criteria for further institutional analyses were developed to transfer the research results to other regions in China.

1.5 Organisation of the thesis

The organisation of the thesis is given in the research framework below. There are three main axes, namely research problem, approach and dimension (Figure 2). In this chapter, the research problem is presented: To achieve a sustainable Fairtrade coffee certification in China, a Fairtrade farmers' cooperative has to be established with suitable organisational mechanisms to submit the application and to manage the certification process. It is necessary to perform the search with the focus of organisation.

Figure 2: The research framework



Source: Author (2012)

An organisation is influenced and formed by the environmental and frame conditions, and these are important to define. In chapter 2, the agricultural development situation is described. To solve the major conflict between land and persons, farmers' migration and rural systematization are ongoing and supported by institutional, economical and natural resources. The systematization experienced in organisation and relevant structures can possibly affect and benefit the establishment of a farmers' cooperative. A concise introduction of Chinese coffee in the Chapter 3 presents the influential factors from the aspect of the coffee industry. This chapter deals with the Chinese coffee market and the specifics of Yunnan coffee, covering its developmental history, production and sales. Chapter 4 introduces the essential background information on the fair trade movement and Fairtrade certification, followed by its history, market operation and related principles. The certificate market in China is described to clarify the relevant requirements for the Fairtrade farmers' cooperative.

To facilitate the development and efficient management of a farmers' cooperative, a comprehensive utilization of various capital is necessary. In poor rural areas, social capital is an important resource. The theoretical study of social capital is presented Chapter 5. With a brief description of social capital's definition, origin, components and classification, the

relevant theory of OSTROM is chosen to explore the local situation in China and to contribute to the construction of a Fairtrade farmers' organisation. Homogeneous group, federation platform, representatives and external authority are obtained from her theory to promote the cooperation and benefit Fairtrade farmers' cooperatives at the local level. At the end the research, the program and methods of empirical analysis are unveiled. As a kind of original resource, social capital is largely affected by local eco-social conditions. Chapter 6, the local natural, social and economic situations are described, while local social capital is described from the perspectives of trust, norms, collective action and network in the following chapter. Different local organisations are portrayed and evaluated for possible modifications concerning the set-up of a Fairtrade cooperative. In the last part of the thesis, a summary and recommendations are presented to provide constructive implications for the establishment and management of Fairtrade farmers' cooperatives in Yunnan, China. The conclusions highlight the value of Fairtrade certification and the local social capital situation, while a Fairtrade organisational model design is recommended to optimize the structure of a Fairtrade farmers' cooperative in the research region and contribute to its sustainable development.

2. Agricultural frame conditions

As a new commercial mode, is fair trade meaningful for China? Can it touch current agricultural problems and possibly contribute to the solutions? Can fair trade benefit from the Chinese government's policies and regulations? Is its farmers' association legal and feasible for the sustainable development in Chinese rural regions? Which organizational model has the most potential from the perspectives of effective management and efficient performance? To answer these questions, it is necessary to introduce Chinese agricultural problems and conditions. The government's development strategy and efforts also need to be described.

The conflict between land and persons is the major problem of Chinese agricultural development. China has about 20% of the earth's population with only 10% cultivated farmland in the world (OECD, 2005). Per capita space of farmland is 0.093 hectare (MINISTRY OF LAND AND RESOURCES, CHINA 2005). Although the population growth rate is reducing, the absolute value of rural labor has been high for a long time (PU 2006: 15). It is necessary to transfer rural labor to increase incomes and reduce the stress of agricultural employment (CHEN 2008; ZHANG 2000:2; ZHAO 1999: 12; CHEN 1998: 15). At the same time, agricultural productivity and value added have to be increased to improve the farmers' livelihoods. According to the policy of the Household Responsibility System (HRS), land-use rights have been distributed to each rural household. The system provides more freedom for the farmers in the selection of crops and marketing surplus production (ZWEIG 1997; KELLIHER 1992). At the beginning of the reform, agricultural productivity increased sharply, since the HRS and increased food prices effectively motivated the farmers (LIN J. 1992: 34; MCMILLAN, *et al.* 1989: 781; SICULAR 1995: 1020; DONALDSON 2007: 898). The percentage of the population living in absolute poverty decreased from 64% to just 16.6% (WORLD BANK 2004).

During much of the 1990s, however, agricultural growth stagnated (BRANDT, *et al.* 2002: 67; MEAD 2003: 117; KHAN and RISKIN 2001). Agricultural production was largely on small and scattered plots of land and carried out by the members of the rural households with severely constrained capital. Critics of de-collectivization lamented the potential loss of productivity caused by dividing communal land (HINTON 1991; DONG 1996: 915; LI *et al.* 1998: 63; BRAMALL 2004: 107). The systemization of farmers is a possible solution to improve their livelihoods and to efficiently allocate various production elements in their farming work such as capital, human resources, land, market information and techniques (LIU 2004: 68;

CHENG 2003; ZHAO 1994: 70). In the following part, the land rights, migration and farmers' systematization, all crucial for sustainable agricultural development in China, are described separately.

2.1 The rights of land

Land rights are the base for agricultural development. In China, land ownership and use rights are treated separately. While the collective characteristic of rural land ownership was not changed, use rights are contracted and distributed for a specific period (STANDING COMMITTEE OF NATIONAL PEOPLE'S CONGRESS 2002). Since the use rights are primarily allocated among members, membership rights play an important role in land contract affairs (LI 2009: 126). The relevant regulations show certain exclusiveness for non-members (WANG, M. 2005: 127).

2.1.1 The collective ownership

In China, rural land ownership usually belongs to a collective unit, namely a production group (STANDING COMMITTEE OF NATIONAL PEOPLE'S CONGRESS 2004; BAI 2003: 49). This unit has full land ownership which cannot be violated by any other groups or government. The local government must not interfere in any legal decisions made by the production group. It also has no right to dispose collective land. The collective land has the same status as state-owned land (HUANG 2001: 116). Only in the public interest or during any critical time, the state can claim its ultimate right for collective land (NATIONAL PEOPLE'S CONGRESS 2004). Since 1978, the HRS has been gradually implemented throughout China. While the collective nature of rural land ownership has not changed, use rights are fixed in binding household-based contracts. Land distribution was fairly performed according to different planting specifications like the location, the fertility of soil and irrigation conditions. Every family was granted a small piece of land in each category. Therefore, it is normal for a family to have nearly eight dispersed land areas (HE 2010: 4). Each collective member in the production group obtains a part of collective land that is evenly allocated and guaranteed by contract. A production group publicly offers land contracts through tender, auction and open negotiation, etc. Most contracts are household-based contracts. The land-use decision is independently made by each family, although the ownership is officially held by the production group (STANDING COMMITTEE OF NATIONAL PEOPLE'S CONGRESS 2002). Each member can be considered as a kind of shareholder for land ownership (WANG, M. 2005: 127). However, a single

member's decision about land ownership is invalid. Only member meetings and a board of leaders can discuss and deal with land ownership affairs. As a member of the collective owners, each member has the right to express an opinion in a members' meeting. Furthermore, he has the right to keep the profit generated from the collective owned land (STANDING COMMITTEE OF NATIONAL PEOPLE'S CONGRESS 2004).

2.1.2 The land-use rights

Land-use rights are separated from ownership and distributed or traded in the form of a land contract. Use rights refer to not only the right for usage but also to a series of related rights, namely (STANDING COMMITTEE OF NATIONAL PEOPLE'S CONGRESS 2002; 2004; WANG 2005: 136-137):

- Occupancy right: The contractor has a direct control and use in contract land.
- Use right: The contractor can decide how to use contract land in accordance with each individual's circumstances and purposes on the land.
- Profit right: The contractor can obtain the income generated from contract land.
- Sublease right: The contractor can sublease use right to others. The tenant follows the contract and has the rights provided by contract and law.
- Mortgage right: The contractor can mortgage his contract right for a loan.
- Transfer right: The contractor can transfer his contract right to others. Contractor does not require permission from the collective economic organization. The sub-contractor should follow the terms of the original contract.
- Cancellation right: At contract maturity, the contractor can terminate the original contract.
- Shareholder system right: The contractor has a right to convert the land contact right into shares.
- Preferential renewing contract right: Land contract in general has a time limit. When the time limit expires, contractor has a priority to renew his contract under the same terms and conditions.
- Right of passing through territory: This applies to the use of neighbouring land. It mainly refers to people or water passing through neighbouring territory.

- Right of petition: If the individual contract right is violated, the contractor can exercise his petition right for help in order to stop illegal actions, to eliminate threats, to recover lost land and to restore land to its original state.
- Repossession and compensation right: The contractor has the right to collect all his assets attached to the land, when he is not able to renew or maintain his contract. If these assets are not returnable, or if they are damaged, the contractor can demand an appropriate compensation from the next land contract.

2.1.3 Membership right

Since the production group is the owner of the collective land, members and non-members have different conditions or are treated differently. Members have certain advantages, especially regarding collective land contract application. They have an absolute right in using the land according to the land contract. Article 15 of the CHINA RURAL LAND CONTRACT LAW (National People's Congress 2002a) stipulates: "The contractor of the household contract is the farmer household in the collective economic organization. Mountains, hills, gullies and coasts and other rural lands that are not suitable for an individual farmer household can be leased through tender, public auction and open contract negotiation". Article 48 stipulates that 'the rural collective land can be leased to other collective economic organizations or non-member individuals under the conditions that the decision is passed by at least 2/3 of member villagers or 2/3 of their proxy voters in a members' meeting. This member's decision is also approved by the local city (county) government. The non-member contractor as an individual or a cooperation should submit their business and financial credit data to the collective economic organization for the credit history review and check before signing a contract'. This illustrates how members of the production group have an absolute right in land-use as stipulated in the land contract. But the non-members have to accept pre-conditions to receive their land-use rights. When members voluntarily surrender their land-use rights, their land shares are rented out. People can participate in the open bidding. The highest bidder gets the land and related use rights. If member and non-member bidders offer the same bid price, members have the priority (STANDING COMMITTEE OF NATIONAL PEOPLE'S CONGRESS 2002).

2.1.4 The tenure of land contract

The land contract policy was gradually introduced in China, beginning in the Anhui province at the end of 1978. In 1984, the COMMUNIST PARTY CENTRAL COMMITTEE (2008) decided that the tenure of land contract should normally be fifteen years. Due to the gradual introduction of this policy, start and expiry date varied from province to province. The first contract expired in Anhui province in 1993. To stabilize the contract relationship and to encourage farmers' investments and increase agricultural productivity, the COMMUNIST PARTY CENTRAL COMMITTEE (1993) and State Council decided to extend the land contract term to thirty years. Until the end of 1999, land contract renewal was completed in all provinces. In 2002, the tenure of thirty years was jurisprudentially confirmed in the CHINA RURAL LAND CONTRACT LAW (National People's Congress 2002).

While the collective nature of rural land ownership is not changed, use rights have been fixed in binding contracts and granted for a certain period. The scattered, small and weak nature of household-based farming has become a general rural situation and creates many problems for agricultural productivity and value added. Labour transfer is supposed to facilitate the transfer of rural cultivated land to increase levels of mechanization and achieve scale merit.

2.2 Migration

The theories of migration are often developed from the perspective of personal decision and motivation (TREIBEL 2011: 39-45). The Push-Pull-Model is the classic and most famous theories on the reasons for migration (LEE E. 1966: 49-56). The stress factors, caused by war, economic crisis and natural catastrophe, are Push Power, while the worry factors are Pull Power, resulting from the superiorities of immigration regions/countries and related personal motivation. Based on this model, many principles were developed, such as 'employment market unbalance' (KÜNNÉ 1979: 66), 'economic rationalism' (QUIGGIN 1997), 'gross social product difference' (ESSER 1989: 65) and 'social situation comparison' (RONZANI 1980: 51). However, individual motivation becomes less crucial when migration is considered as an interaction result of historical, cultural, political and economic elements (HAN 2010: 14). From the aspect of social pattern, relevant mass migration can be studied in the process of urbanization (PETERSEN 1958: 258). Here governance plays an important role. The discussion about town and city migration among many Chinese academics

is a typical example to present the consideration of governance. Due to the relative low cost and risk of migration, some scholars advocate the town as a main residential platform and products exchange bridge to organize rural immigrants (GENG 2008: 17; GU 1998: 60; WEN 2000: 21-23; MAO 2004: 70). Although farmers leave their village, they can find employment opportunities in local towns. Therefore, YI (2004: 18-19), CHEN (2000: 11) and LU (1998: 2) believed the development of towns is dependent on urban enterprises that provide jobs for rural laborers. On the other hand, some scientists favor city migration, where farmers move into the cities. YANG Y. (2000: 6) and MENG (2003: 66) believed that town migration is a kind of low level urbanization and cannot efficiently use land for industrialized agriculture due to the relatively weak administration power and low population density. ZHANG (1998: 14) and CHEN (1998:31) considered the absorption capacity is also very limited in towns compared with cities. The statistical data of migration also seems to prove the point. In 2004, about 43 million rural labor moved to coastline provinces and worked there for at least one month (CHAI 2005: 18-19). GENG (2008: 6) researched a region in central China and concluded that only 22.5% rural migrant laborers worked in local region.

2.2.1 The advantages of migration

Migration generally has contributed greatly to the economic boom in China (CHAI *et al.* 2006: 17; PAN W. 2000: 11; HU, Y. 1998: 31). Firstly, it promotes the development of the inland labor market and offers a cheap labor supply. Migration and employment are the farmers' own decision. It means that the farmers can start their career in different industries and areas. This changes the old concept and institution of employment and demography. The workers move to the industries and cities where there is high labour demand and lower access barriers. The employment allocation of migrant workers does not depend on the government's arrangement, but is according to the law of market supply and demand. Due to the low labour cost, Chinese companies have a competitive edge in the process of economic globalization (QIN 2010). Furthermore, rural migrant workers advance the development of the cities. They usually engage in construction and other social service industries, where jobs are hard, dirty and sometimes dangerous, and not attractive to the local workers. The migrants efficiently fill the gaps in this labour pool.

Migration benefits not only urban but also rural areas. It considerably reduces employment pressure in the rural areas and increases farmers'

incomes (PAN, Y. and CHUI 2009: 164; XU 2008: 73-74). It plays an important role in rural poverty alleviation. Although rural migrant workers on average had only 45% of the income of normal citizens, this income contributes almost 60% of their total annual income (PEOPLE'S BANK OF CHINA 2005). Migration also helps the migrant workers' families, since most of them send money back home to support their family and farming (WANG *et al.* 2009: 57-58). In 2005, 580 billion Euro were remitted from the coastline provinces to central and west regions of China (PEOPLE'S BANK OF CHINA 2005). Besides money, migrant workers gain new concepts, capacities, experiences and social networks from their city lives. When they go home, they can propagate what they learn from the cities, which benefits local economic, institutional and democratic development (PAN Y. and CHUI 2009: 164).

2.2.2 The disadvantages of migration

Although most Chinese scientists and governmental policies tend to promote further migration, the large-scale labour movement causes a lot of eco-social problems and institutional voids in China. The problems caused by migration challenge sustainable development in rural areas. First of all, agricultural production is affected. This can be viewed from the perspective of human resources. A large number of young farmers left farming for city and are unwilling to return to the villages, particularly the educated farmers. In 2006, the development research centre of the China State Council in a survey found that 80% of the young farmers in 33% of the villages moved out (GENG 2008: 7). It affects the quality of agricultural labour and agricultural production. Farming is done by old people and women (SHENG 2006: 17; WANG G. 2006: 212-213). Moreover, the migration phenomenon influences the younger generation. In 2008, there were approximately 58 million rural children and teenagers who could not be taken care of by parents. About 69% of them were under 14 years old (NATIONAL WOMEN ORGANIZATION 2008: 34). Unlike in traditional families, they cannot grow up healthy and sound in all aspects (PAN, Y. and CHUI 2009: 164). The ratio of juvenile delinquency is increasing. In the long run, the rural development potential deteriorates.

The negative influence on cities is also remarkable. In a relatively short period of time, mainly farmers go to the cities to look for jobs. This can cause dramatic labor oversupply. In 2009, approximately 230 million rural labourers worked outside their villages for longer than 6 months (YANG, Z. 2010). It is difficult to supply enough jobs to meet this huge workforce,

especially during periods of economic crisis. Low education level and lack of social networks also limits job selection and advancement. Workers have to take whatever jobs available to them first, work long hours, accept relatively low pay and face an unstable and dangerous working environment (DU, Y. 1997: 11; ZHOU 1997: 100). If a large number of migrant workers become urban paupers, this can lead to social problems. For example, rural migrant labours are generally not covered by the social welfare system. Without government minimum wage protection, medical insurance and labour insurance, the high cost of living is a major concern, particularly regarding medical expenses, urban school tuition for their children and rents. Furthermore, migrants and their children are discriminated by the urban residents. They usually stay with their group of people, relatives or friends from the same hometown regions. Although most migrants earn more than where farming, their living conditions are less stable in the city.

Since life in the cities is insecure and the social safety net in China is not well established, many migrant farmers do not want to sell their land-use rights. If they cannot work and stay in the city, they can return and engage in agricultural production, and the agricultural income can provide basic subsistence expenses (PAN, Y. and CHUI 2009: 165; WANG 2005: 127). Therefore, they do not sell but let their land lay waste, if nobody in the family can cultivate it (WANG and CHEN 2009: 28). Agricultural development is thus hampered. The dilemma is difficult to solve thorough policy adjustment or administrative power in a short time, since the tenure of land-use rights was extended to thirty years in 1999 and jurisprudentially confirmed in the Rural Land Contract Law. It is necessary to research for a proper farmers' organization model to effectively reallocate land, labour and capital based on an institutional system and market mechanisms.

2.3 Organizational types of Chinese farmers

Farmers' systematization is part of the development plan of Deng, who was the first prime minister of the communist party after the Cultural Revolution and designer of the Chinese economic reform. He concluded the agricultural development pathway in 'two steps'. The first step is related to the dissolution of communist communes and the release of the Household Responsibility Reform. To ensure positive effects, the first step is going to be operated for a long period. The second one aims to solve the challenges caused by the requirements of modern agriculture and large consumption of agricultural products. Collective economy and related farmers' cooperation

are considered as the solution to improve production efficiency and agricultural techniques. In 1993, the ‘two steps’ plan was finally confirmed and became the main concept for Chinese agricultural development. For the guidance of farmers’ cooperation and the optimization of different organizational models, corresponding laws and policies were gradually released.

2.3.1 The promotion strategy of central government

At the beginning of the economic reform, some farmers formed economic associations. Though the rural economic strategy was focused on ‘individual household development’ (CHINESE COMMUNIST PARTY CENTRAL COMMITTEE 1982), the central government not only accepted but also tried to understand and guide the associations. It first confirmed the official status of relevant organizations in the communist party document. “Systematization is an inevitable requirement in the development of production. It is the only way to achieve socialistic modern agriculture (POLITICAL BUREAU OF COMMUNIST CENTRAL COMMITTEE 1983)”. Later different kinds of associations were investigated and verified in practice (KONG and SHI 2008: 28). Primary guidance was released, despite systematization, as a new economic development direction that was in the stage of exploration. Several crucial factors were listed, such as ‘voluntary participation’ and ‘democratic rule making’ (CHINA STATE COUNCIL 1985: 2).

After approximately ten years of observation and experiments, the central government gradually had a clear understanding about the development of farmers’ systematization. In the 1990s, relevant policies and laws were more focused on concrete methods. Various cooperation and alliance organizations were generally considered as a kind of collective economic entity, based on the labour and capital union of farmers (CHINESE COMMUNIST PARTY CENTRAL COMMITTEE and CHINA STATE COUNCIL 1998). The systematization was officially promoted, since its economic and social contributions were well recognized. A series of preferential policies were introduced to support the development of different organizational models. Incomes from technology, sale and labour service were exempt from tax for rural associations (MINISTRY OF FINANCE AND STATE ADMINISTRATION OF TAXATION 1994; 1995). Financial institutions were encouraged to support large economic entities through agricultural financing (CHINESE COMMUNIST PARTY CENTRAL COMMITTEE and CHINA STATE COUNCIL 1995). At the same time, the government started to further

regulate the management system in rural economic organizations. In 1996, the 'Financial Rules in Village Economic Organizations' (FINANCIAL MINISTRY, 1996) were released, which applied to capital accumulation and management, financing mechanisms, investments, revenues and expenditures, benefit distribution, financial statements and related human resource management.

In the first few years of the 21st century, the development of rural economic organizations was limited, since the definition was vague (KONG and SHI 2008: 32). Relevant policies were difficult to apply and the development direction was unclear. In 2002, the 'Agriculture Law' was put into effect by the National People's Congress. The government encouraged farmers to voluntarily organize different specialized economic organizations based on the household contract system on land-use. It provided the juristic basis for farmers' systematization. In 2006, the 'Farmers' Cooperative Law' was passed by the Standing Committee of the National People's Congress in which the farmers' cooperative is standardized and addressed and defined as follows: *"Based on the system in the household contract responsibility on land-use, the farmers' cooperative is a form of economic reciprocal organization with features of voluntary participation and democratic management, which is organized by providers and users in the fields of similar agricultural production, trade and related service."* There are nine chapters in the law, namely general principles, establishment, registration, members, internal management, financial management, dissolution of cooperative, supportive policies, legal responsibility and collateral clause. The release of the cooperative law provides a sound juristic foundation for further policies and regulations. Six months after enforcement, several corresponding policies were introduced by the China State Council, Ministry of Finance, State Administration for Industry & Commerce and Ministry of Agriculture. These included application format standard, accounting system and cooperative demonstration regulation. The relevant tax preference policies were announced particularly for farmers' cooperative (MINISTRY OF FINANCE and STATE ADMINISTRATION OF TAXATION 2008). Moreover, the central government arranged specific funding to support the farmers' cooperatives. From 2003 to 2010, 187.5 million Euro were provided and distributed by line ministries (KONG 2011: 30).

The history of policies and laws shows that different types of institutional resources have been gradually used to promote farmers' systematization in the last thirty years. In the 1980s, important policies were released mainly by the Communist Party and its Central Committee. Since 1990, the China

State Council, as an administrative authority, has often participated in the formulation process of crucial policies. The influence of the ministries was also increased by the issue of relevant supporting regulations and policies. Since the beginning of the 21st century, the development direction has been generally confirmed and ensured by laws. The intervention of jurisdiction has established a stable foundation for further development of farmers' systematization. Based on laws, not only corresponding policies and regulations are drawn but also financial capital is offered by line ministries or government agencies.

2.3.2 The support of local government

Due to the complexity and diversity of the rural situation, many regulations were specifically provided and adjusted by the local governments. Until 2008, 29 provinces had issued specific documents to support relevant policies of the central government in terms of finance, taxes, credits, land, electricity and human resources (KONG and SHI 2008). Local governments offered financial funding to promote cooperatives and to increase their management capacity. In Yunnan, the local government provides specific funding prog for farmers' cooperative producing cash crops (YUNNAN BAOSHAN GOVERNMENT 2008). Some demonstration projects were also organized for the guidance and research of farmers' systematization. The problems in the organizational models were quickly found and addressed. Various cooperatives grew rapidly and played a leading role in local economic development (XIE 2011: 102; HAN *et al.* 2006: 1-2). For instance, Yunnan government started a cooperative evaluation program to support well-organized farmers' cooperatives. Various cooperatives are first selected and nominated by the local regional government. The winner in the evaluation program can obtain specific funding. Its experiences are documented, analyzed, summarized and promoted in Yunnan (YUNNAN GOVERNMENT 2013).

Joining a trade fair is another way to support relevant organizations in the sale of their products (ZHANG, L. 2005). Any farmer or cooperative can freely participate by paying a management fee. The trade fair provides not only marketing channels, but also vast information sources about pricing, demand-support relationships and activities in the market. Farmers and their cooperatives can thus arrange their production effectively. An example is the Yunnan Dehong government sponsors annual coffee festival since 2009 to facilitate the expansion of coffee marketing channels (YUNNAN DEHONG

GOVERNMENT 2012). Coffee farmers' cooperatives and companies can participate in relevant coffee events.

Furthermore, various education courses and seminars are organized by the government to increase farmers' awareness about relevant laws, policies and regulations (XIA 2008: 17). These are provided at the regional level as well as at the village level. Farmers have the chance to learn basic economics and cooperative concepts (WU Y. *et al.* 2008: 38). For specific crops, such as coffee, related research institutes have a minimum quota for training programs. Besides basic training, management courses are also offered, which focus on training and promoting the future leaders, managers and financial experts for the farmers' cooperatives. The successful cases in farmers' cooperatives are disseminated and rewarded to create a positive public feedback. Their experiences are documented and published (WAN 2006: 18-19; HAN *et al.* 2006: 23-24).

To promote farmers' systematization, the measures of local government are more flexible and specific than the central government's approach. Combined with financial and human capital, institutional resources are offered to search for the optimal organizational model. From the supply and demand side of agricultural production, the local government facilitates farmers' systematization. Fair trade is focused on marketing, while training courses enhance the farmers' capacity for management in the cooperatives.

2.3.3 Organizational models

A proper organization model can improve farmers' competitive capacity, save transaction costs, reduce market risks, achieve specialization, and increase incomes (YU *et al.* 2010: 63; BONUS 1986: 310-311). There are many organizational models. According to various promoters (SUN and YI 2009: 77; ZHANG and DONALDSON 2008: 12114-12115; ZHANG and WANG 2007:24; HAN and LI 2003: 20), they can be divided into four categories, namely 'lead market' initiative, farmers' cooperative, specialized market and others. NIU (2002) examined the Chinese farmers' systematization and found that the lead market initiative model had the highest share of 41%. It has strong advantages in the fields of economic power, production scale, technique, management and organizational efficiency. The cooperative model accounted for 33% and specialized market model for 12%. These three models are introduced in the following.

2.3.3.1 Specialized market model

The specialized market contributes to the involvement of stakeholders and the exchange of information between the demand and supply side through the process of decision-making and market consultation. It is usually in a rural region where wholesale or trade takes place regarding one or several specific agricultural products that have either similar or complementary functions (ZHANG, L. 2005). Many shops or booths are set up in the market, which is organized by the government, companies or individuals and managed by the investors. The local Administration for Industry and Commerce is responsible for the supervision. Anyone can freely participate after paying the management fee. Buyers and sellers can directly compare the product quality, negotiate and settle an agreeable price. The market helps to solve the problem of fragmented demand, facilitates the product supply chain and expands the trade channels. In most rural wholesale markets, various visual and auditory equipment is provided for information data exchange and posting. Participants can learn about the trade activities in several main wholesale markets nationwide. Farmers and their cooperatives can better adjust their production plans based on the product supply and demand. The transaction cost is also significantly reduced due to the market scale. The transparent competition benefits all parties. The specialized market, as a type of organizational model, has a stable interaction with farmers and related associations. It often promotes the regional production of specialized agriculture products (LUO B. 2002: 302-303).

While the specialized market is based on market mechanisms to coordinate supply and demand, its development is broadly supported by the institutional system. To guide and promote the specialized market, the Ministry of Agriculture released a series of related policies (XIA 2008: 20). In 2006, a promotion project was announced to standardize the relevant market infrastructure, such as roads, trade halls, storage and preservation equipment, information technology system, food safety system, and consumer services. In 2007, the ministry issued a development plan to clarify the goals, principles and construction plan. Later, it signed a cooperation agreement with the Agricultural Bank of China to provide and supervise credits. The ministry offered a list of 615 specialized markets and the bank planned to give a credit line of 1 billion Euro to support and upgrade the projects.

The Shouguang wholesale market in Shandong province is a typical example and the biggest vegetable market in China. Vegetables from over

20 provinces and cities are traded here daily. The government has opened two main express systems “free path”. Except for the market transportation vehicles, all vehicles have to pay an express road toll. Currently, the annual trading volume of vegetables is 1.7 billion kg with a value of 200 million Euro. Over 200 vegetable varieties are sold in the market. Due to the enormous variety and large quantities, the market is well known and attracts buyers and creates better marketing channels, as local farmers’ state: ‘Higher production, less difficulties in selling’ (HE and WEI 2010: 38). The Shouguang market greatly enhances local vegetable production and increases farmers’ incomes.

2.3.3.2 *‘Lead market’ initiatives model*

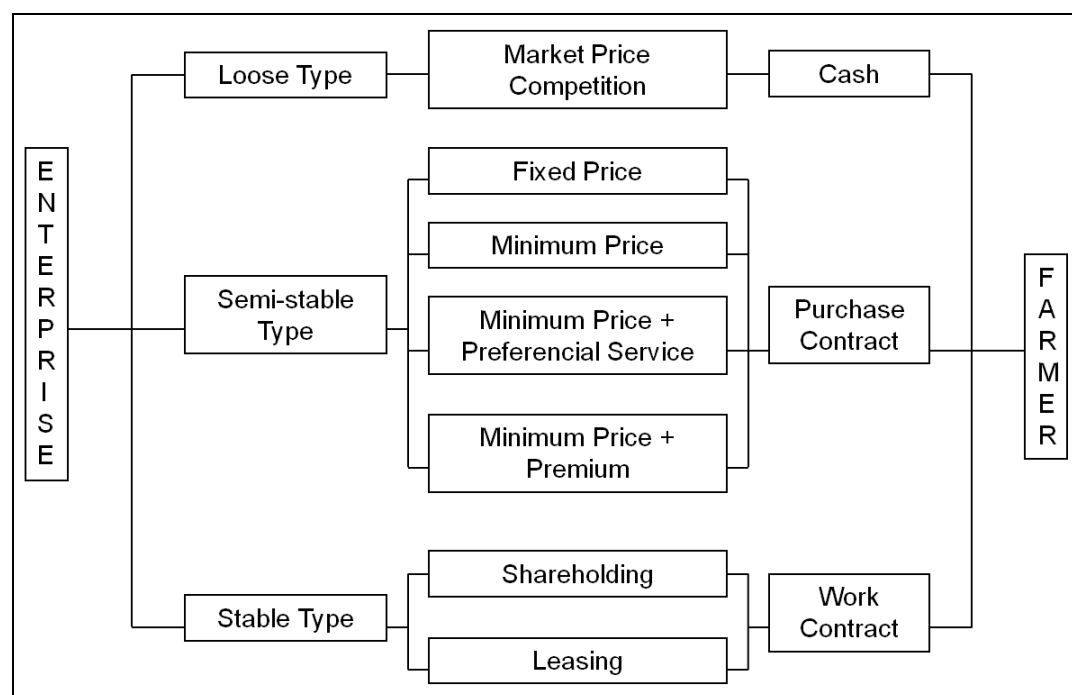
The ‘lead market’ initiative model was introduced to increase the level of farmers’ systematization and is considered as an effective development direction for industrialized and modern agriculture (AI and PAN C. 1995; JIANG 1996: 1). Farmers receive financial support, technical services, product sale guarantees and post-harvest assistance from the company. In return, the company receives a stable raw material supply and good quality products. Farmers have the labor, land and products, which the company has professional expertise, processing machinery equipment, label branding and marketing network. The collaboration between the farmers and the company is through almost the whole of the supply chain. The benefits and risks are shared by both parties. There are generally three sub-models from the perspective of the benefit mechanisms (Figure 3).

The first sub-model is loose and led by market supply and demand. The participation of a large enterprise increases the demand of a specific product. Farmers are encouraged to produce more by a higher market price. A specific agricultural branch might be built up in certain areas (DU 2003). Trade contracts made by both parties create another method for profit distribution. A company makes a management plan based on market information, which is achieved by purchase contracts with local farmers. A stable partnership is possible, especially when the contract is valid for a long period of time. Both sides attempt fulfill the contract to maintain their good reputation and enjoy the long-term profit (HAN and LI 2003: 20). This model can be regarded as a semi-stable situation.

In the last category, a stable relationship can be formed. The company wishes to have a large area of farmland for long-term usage to achieve industrialized farming. It acquires individual land from local households by leasing or owning shares with the assistance of village heads (HE 2010: 4).

The costs would be too high if the company dealt with farmers individually. Therefore, the company enters an agreement with a village and lets the village heads handle the negotiations with each household later (WANG, C. *et al.* 2009: 58; WANG and CHEN 2009: 24). Farmers can sign a work contract and become a salary employer. By the year end, they receive a rental payment or dividends. To clarify the rights and responsibilities, contracts are normally set up. The company pays for and offers technological supervision or supplies production material like fertilizers, pesticides and seeds. The farmers provide products or labor service and receive a stable income in return (GUO and JIANG 2004: 10-11).

Figure 3: Benefit mechanism types between enterprises and farmers



Source: Own illustration based on Guo and Jiang (2004)

However the influence of big enterprises is somewhat limited. According to the research of the Agriculture Ministry (NIU 2002), the average number of households leasing their land to an enterprise is dropping. In 2000, each enterprise represented 899 households, compared with 1.687 in 1996 and 1.622 in 1998. The balance of strict management and cooperation on an equal basis is the main challenge. An inequality can be found in different business areas between farmers and company. A company has a stronger economic power and more institutional resources, whilst a small household is weak in capital, knowledge and network. Without strong protection of the collective power, an individual farmer usually ends up in an unfavorable position in business negotiations. Farmers lose their rights in the decision-

making process of product price and quality. Their production motivation is consequently shattered.

In the first two sub-models, there is a loophole in the profit allocation mechanism. Opportunistic behavior cannot be completely avoided, as implementation of the contract law is difficult. When the market price is much higher than the contract price, farmers have a strong incentive to sell products directly in the market. In contrast, the company tends to purchase products from market, when the market price is much lower than the contract rate. Despite the existence of a contract, the juristic process design cannot efficiently restrict opportunistic behavior. If a company violates the agreement, an individual farmer does not have the capability and financial resources to file a lawsuit, and has to tolerate the unfairness. On the other hand, it is also difficult for a company to sue each farmer individually if many farmers breach the contract together. The legal costs are too high compared with the benefit of keeping it the way it is. The weak protection for both sides increases the uncertainty of the first two sub-models.

Although the last one leads to a stable economic condition, serious social and cultural problems can result. The company tends to offer local farmers jobs to facilitate the transfer of their land. In reality, some local farmers prefer to migrate to city for better job opportunities or to set up their own business in the village. They sign the land contract and give up their property. But when they fail to succeed in the city, they cannot get their land back and become landless farmers. It is a dangerous scenario for farmers, especially as the social safety net in China is not well established. Furthermore, a group of outside employers can move into the village to take the business opportunity, since the jobs are open for anyone who applies. This leads to new cultural differences and conflicts to the original society. New problems are difficult avoid, at least at the beginning (HE 2010: 201).

Despite the possible problems, the local government cooperates with companies to ensure economic growth and tax income. On the other hand, big enterprises often use preferential policies and their network in the administrative system to increase their benefit. Institutional resources are steadily transferred between both sides. This increases the risk of regional protectionism and monopolization, which is harmful for the national economy and farmers' interests. To reduce the risks, the central government strengthens guidance and management. Meanwhile, the central government gradually emphasizes the model of cooperatives and supports their growth by encouraging different development approaches.

2.3.3.3 Rural cooperative model

This history of rural cooperatives can be traced back to the 1990s. It started with the ‘professional technique guild’ or ‘research club’, which was a loose organizational form and often organized by local agro-technical institutes (HAN and LI 2003: 20). The major target was information exchange about techniques and market information. There was no concrete development direction or specific regulation. Members’ rights and obligations were also not clear. The organization had a high turnover in membership and was not stable. Since the 1990s, the rural eco-social environment has changed greatly. The agricultural market was extended to the international level. The agricultural structure has been continuously adjusted, optimized and upgraded. The competition in the market was increased, especially after China’s entry to the WTO. The demand for professional technology has expanded. Farmers wish to have better cooperation in different agricultural fields. They have gradually built up various agricultural economic cooperatives. At the end of 2008, there were over 110,000 associations with 1.4 million member households. The members’ annual income is on average 20% higher than that of regular farmers (WU, B. 2009). In this research, the main organizational models are introduced (Table 1).

Table 1: Major models of farmers’ cooperative

Model	Initiator	Cooperation type	Production mean	Management mechanism	Price	Characteristics	Size
Farmers	Capable individual or large plantation family	Shareholding	Farmers’ production & Cooperative’s sales	Shareholder’s meeting and Leader’s personal decision	Market price & Profit distribution according to trading volume	Voluntary, transparent & cooperative	Small
Government	Village	Administration	Farmers’ production & Cooperative’s sales	Administrative governance structure	Market price	Compulsive & stable	Medium
Company	Company & Village cooperative	Contract with company	Farmers’ production & Technical support of company	Administration & Company management system	Protection price	Cooperative & stable	Big
	Company & Farmer cooperative	Contract with company	Farmer’s production & Technical support of company	Cooperative & Company management system	Protection price	Cooperative & moderately stable	Small
Development project	or financial institution for rural development	Shareholding	Farmers’ production & Cooperative’s sales	General assembly & Elected Board & Supervisor group	Market price & Profit distribution according to trading volume	Voluntary, transparent & democratic	Small

Source: Own illustration based on Zhang and Donaldson (2008) and Han and Li (2003)

For all four models, the natural village is a crucial platform for the members’ collective cooperation and a domain that has been strongly influenced by local institutional resources for a long time. It is beyond the influence of concrete institutional arrangement. In 1947, FEI (2007) pointed out the importance of natural villages when he analyzed the interrelationship in traditional natural villages from the view of anthropology. Later, ZHANG, L. (2005) focused on the development history of communist communes and obtained a similar result. Besides the studies

with specific institutional background, this has been proved by academics from other fields. HE, X. (2009) used the 'we' term to point out the function of a village, while XIONG, W. (2008) and CHAO (2004) observed the collective action to identify the validity scope. HE, X. (2008) emphasized the influence of the village administration system, especially in the field of common product provision.

A cooperative promoted by a village has performance advantage. With the support of strong administration power, it can efficiently organize and finance villagers by supplying common resources. For production, a cooperative can efficiently reallocate materials, machinery and other resources to achieve a scale effect, since it can exchange lands on behalf of the village. It is possible that some households do not want to participate in the cooperative. Land exchange is a solution to avoid land dispersion in the cooperative. Although the leaders of a cooperative are the heads of the village, they can be replaced during the election of village heads. HE, X. (2008) considered that the results of an election can reflect the local power allocation and social situation. OELOFSE (2010) also believes that the cooperative is supported by administration power and local social capital.

A cooperative founded by farmers is probably the richest in social capital, since the farmers personally know the initiators and voluntarily join the cooperative. The founders are usually local and have advantages regarding capital, technology, reputation and good social network. Self-organizing, self-managing and self-supervising are its characteristics. It is relatively easy to achieve an agreement in the cooperative due to its small size and high level of transparency and members' participation. In other words, the organizer can only organize a small group of farmers whom he knows well to maintain cohesion and implementation capacity. It reduces the competitive capacity with respect to large companies with a large capital and production scale.

As in a village cooperative, the development of farmer cooperatives largely depends on the leaders' personal ability and social networks. Leaders constantly search for resources to solve difficulties in production and sale. Institutional resources are important for the cooperative, since they can facilitate access to other capital. Bank credit is a good example. A cooperative often has a shortage of funding and only few assets. Money is usually raised from each farmer member who also has a heavy financial burden. Bank credits are a possible solution. However, banks do not like to offer credit services due to the high risks in agriculture and weak collateral. Therefore, it is necessary to have external support to mitigate the risk of

refusal by the bank, such as guarantees by the government and specific policies.

Sample 1. Farmers' Cooperative

The Nanhui honey farmers' cooperative has been organized since 1993 by three initiators, who were responsible for different parts of the cooperative. Mr. Gu was in charge of marketing and management, since he has been head of a state bee farm for 16 years. Although the farm was dissolved and he retired, he still had a wide personal network, especially with the local government. Mr. Wan used to be a big honey producer and technical expert with over 40 year experience. He had a good relationship with others farmers, since he often helped to solve their production problems. He organized farmers in establishing the cooperative. The third person worked as a formal accountant in the state honey farm and was responsible for the finances of cooperative. At the beginning, 40 households joined the cooperative. Each member had a share of investments from 200 to 500 Euro. The total amount was 30,000 Euro, including the 10,000 Euro sponsorship from the town government. The first member assembly elected a five-member committee and a supervision group with 3 supervisors. The cooperative rules were also set up and released to the members of cooperative.

In the first stage, there were no preferential policies. Agricultural risk had to be overcome by collective support. Once, many bees in a member farm died, the loss was high but the cooperative had no financial ability to compensate the loss. Mr. Wan, as a leader, personally gave the household 12 boxes of bees. Later on, Mr. Gu used his personal network to receive credits from the bank. The cooperative regained stability and entered into a fast development period. Mr. Gu had connections with the owner of a supermarket chain, so the honey products could be directly sold in this supermarket. The cooperative also established a business cooperation with the biggest local honey company. The cooperative could thus concentrate on the production and related quality improvement. Any defective products or quality issues can be traced back to the individual producer. The local government sponsored the members to participate in various agricultural trade fairs and offered training courses. In 2003, the trade volume reached 1 million Euro and remained at this level for the next two years. When the leaders attempted to increase their personal shares for a bigger profit gain, this caused interest conflicts with the rest of the members. Nearly 25% of the farmers left the cooperative and the leaders had to drop their plan. After this happened, the leaders increased each member's shares and

extended additional benefit welfare to everyone. The members were satisfied, and the cooperative regained its stability. (Source: Zhang, 2005)

Cooperation with a company is another possible development solution. A company not only supports the production process but also provides marketing channels and professional management. Thus, cooperatives are willing to work with a company. The cooperative can organize individual farmers to create an industrialized agriculture platform, provide raw material for the company and ensure a stable social environment. The combination of each advantage in utilizing institutional resources can create a win-win situation for both parties. Companies often have long-term contract relationships with cooperatives, since the risk of violation is reduced compared with contracting with individual farmers. This system can simplify management and decrease managing costs. The farmers are able to enjoy most of the advantages of the farmers' systematization in production and marketing. In addition, they have stable incomes and long-term planning. The model seems to be successful in practice. Many farmers are willing to participate in the model, although they have to accept a strict management (OELOFSE 2010: 1788).

Sample: Enterprise + Village Cooperative + Farmers

The Shandong Asian Organic Vegetable Company used to have contracts with small-scale individual farmers. However, these farmers could often not meet the quality standard. Since 1998, the company has selected and signed contracts with approximately 30 village cooperatives in the region that have good farming conditions and strong organizational ability. In each cooperative, the company invests 500 Euro to become a member, whilst farmers give their land-use rights as their share in the cooperation investment. Official regulations in the cooperative are passed. The leader of the community party group is elected as a chairman, while the village heads become supervisors. Important issues are discussed and decided in the representative meetings. The company annually issues the farming plan and signs contracts with the cooperatives. It also invests in different projects to support production, such as soil quality improvement, infrastructure reconstruction and plant breeding. Seed provision, cultivation and management are standardized and guided by the technique inspectors of the company, who live in the village. To maintain vegetable freshness for export, company sets up processing plants in the region where vegetables can be immediately processed. The cooperative provides fertilizers, plastic sheeting and training courses to its members. It is also responsible enforcing organic standards, which have to be strictly followed, and

ensures other product standard and on-time delivery. The company deals directly with the cooperative, purchases products according to the agreement and pays 6 Euro cooperative fees for each ton of vegetables. The average income of the members is 15% higher than regional level (Source: Han, 2003; Oelofse, 2010).

A cooperative promoted by a development project is a by-product of different international and national development projects. It is not popular but important due to its characteristics of democracy, transparency and participation. Farmers voluntarily participate and take the majority part in the cooperative. Various participatory approaches and training courses are usually provided to help farmers to set up their own rules and cooperative structure and to inform them about the roles and rights. The cooperative receives a certain amount of project funding and technical support from project experts. Projects often address the issues of environmental protection, fair and equitable rural innovation and livelihoods. Therefore, farmers can receive not only economic benefits but also social and environmental ones from different levels. As in other organizational models, the utilization of institutional resources is crucial. 'In any case, political decisions have to be made that lead to structural reforms of the public administration and a different allocation of financial resources' (GTZ, 2005). Moreover, the access to institutional resources can offer long-term support if the dependency of farmers and cooperatives cannot be avoided in the project period (SONG and AN 2011: 44-45; GAO and ZHANG 2008: 127; GONG 2005: 74). An appropriate integration with the government's development plan not only can reduce the difficulties of performance but also can enhance the persistent level of project effect (Xiong Q. and Zhu, 2006: 313). The introduction of contracts related to legal obligations can also facilitate the management in the cooperative.

Sample 3: Development project cooperative

The Xucheng project cooperative established by Professor Wen with the University of Renming and the head of Xucheng village in 2004 illustrates the difficulties in managing a cooperative promoted by a project. 134 households voluntarily joined the cooperative with 10 Euro per share investment each, whilst Professor Wen personally invested 1,000 Euro. The general assembly was the leading institute, while the elected board with 9 board members was responsible for daily management. The supervision group inspected the decisions made by the elected board and had to report to the general assembly. There were 6 supervisors and 1 independent supervisor. All of them had a three-month probation period. At the end of

this period, they had to pass the performance review in the general assembly. After the assembly permission, they could officially use their rights for a three-year term. A re-election was possible. At the beginning, the cooperative successfully motivated farmers to provide common products. For example, the roads in the village were voluntarily repaired by the members, with farmers stating: 'we all know the advantages of collective power. Thus we participated when the villager head told us about the idea'. Later, Professor Wen opened a free training institute in the cooperative. The government did not approve, since it was considered beyond the service area of the cooperative, and he was unable to persuade the relevant authorities to agree. It thus remained closed until Professor Wen became an institute head at the People's University of China. The training institute was re-opened under the name of National Training Base Project. Its initial cooperation with the local government was poorly coordinated, as testified in a town deputy's statement: "the cooperative had no relationship with us from the very beginning".

The cooperative has two major sources of income. First, the cooperative can buy material for production and livelihoods at wholesale prices in the city and re-sell to members at a cooperative discount price. As the price is lower than the regular market price, the cooperative can benefit from the price difference. After few months, it was discovered that some executives bought the materials at the wholesale price also for their private use. They could have a group purchase discount and did not need to buy material at a cooperative price. A general assembly was called in to address this unfair price advantage. The board members finally realized their mistake and paid a fine. Although the conflict was solved, the level of cohesion was reduced. Later, a price war was caused by some local merchants, whose rates were more competitive. The cooperative members and other farmers no longer bought their material any more from the cooperative discount source. In the end, cooperative gave up and let a reliable middleman take over the business.

Organic agriculture was the second development pathway for cooperative income. With the financial support of the project, the cooperative leased 5.3 hectare land in the village for an organic melon plantation, which was subject to a ban on fertilizers and pesticides. Weeding was also not allowed. Thus, the weeds grew all over the field. The villagers did not understand and considered it as idle farming due to cooperative negligence and laziness. The land produced very little. It became a village joke that "The weeds were almost as tall as a person, but the melons were as small as one's fist". Later, the project expired. The villagers could not see an

economic benefit from organic farming and were very disappointed. Finally, the village took back the land from the cooperative. (Source: He, X. 2008; Jiang, Z. 1996)

The farmers' systematization is considered a possible pathway of rural development to protect farmers' interests and improve their livelihoods. In the last thirty years various laws, policies, communist party documents, and regulations of line ministries were systematically released to support farmers' systematization. Furthermore, the farmers' entry into various organizational models is facilitated by different rules, taxation, farmer training, standards and pricing in a rather market-oriented Chinese economy.

Village-based organizational mechanisms seem to be optimal for the access to local social capital, and contribute to sustainable growth of the cooperatives, while the cooperation with enterprises can possibly enhance productivity, provide marketing channels and lead to stable income for the farmers. The experience in China might be an inspiration for fair trade farmers' cooperative to improve economic efficiency. However, the participation of companies can be questionable for fair trade, since this probably causes an unbalanced power allocation in the farmers' cooperatives. A sound solution depends not only on fair trade standards but also on the market and production situation of specific products in a particular country. In the next chapter, coffee market and production in China are described as a basis for the potential of fair trade in China.

3. Coffee market and production in China

The middle class in China comprises approximately 300 million people with an average annual growth rate of 1% (WANG, H. 2010; LU, W. 2009). The rapid growth of the middle class in the country has drawn the attention of many multinational coffee companies, like Starbucks, Nescafé, Kraft Food, etc. (JOPSON and HOOK 2011; SHI 2011; SHIPPER 2011). The growth expectations for the Chinese coffee market are high. However, how does this market trend affect the Chinese coffee farmers?

To better understand the coffee farmers' situation, the overall Chinese coffee market is introduced first. The main focus of the Chinese coffee industry has been on instant coffee production for domestic consumption. Although part of the coffee exports is re-imported to China⁴ due to the 5% coffee export tax rebate, the total coffee export volume is low. In 2009, about 40,000 tons of coffee beans were produced, while only 3,315 tons of roasted beans were exported (YDRC *et al.* 2011; FAO 2012).

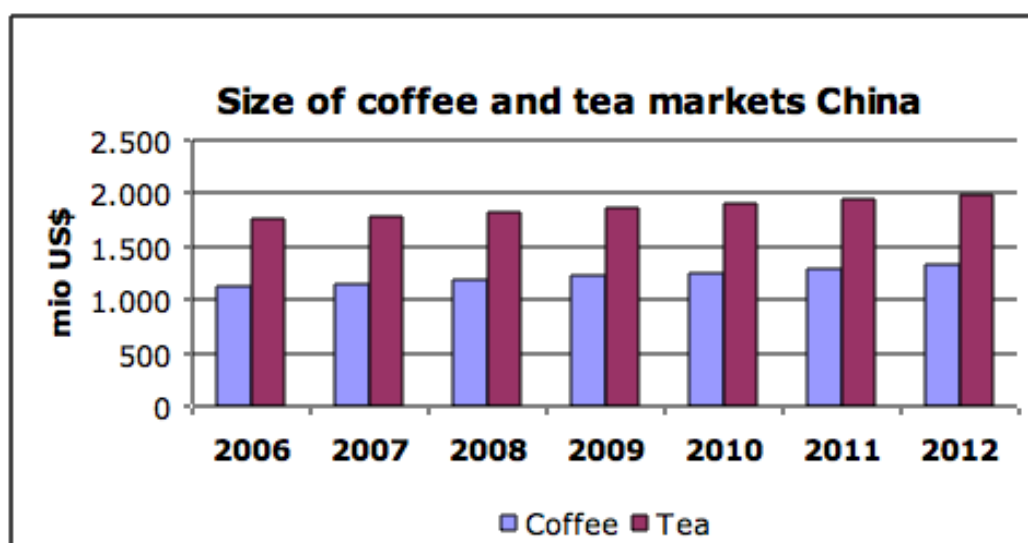
In the second part of this chapter, coffee production in Yunnan, which accounts for 98.8% of Chinese coffee beans (YDRC *et al.* 2011), is illustrated. Furthermore, quality management and industrialized agriculture, production conditions, processes, the development potentials and problems are described.

3.1 Consumer coffee market

Coffee consumption in China has taken a long time to develop in a society which has deep roots in a tea-drinking culture. Coffee drinking is not merely considered beverage consumption, but rather a new experience of a modern lifestyle and a sense of luxury that is affordable to many average Chinese (SOMERVILLE 2010; SONG, L. 2005: 33). To promote coffee drinking, many big international coffee companies host free seminars in coffee shops to educate customers about coffee, its history and the culture around it. A great deal of money has been spent on advertising over a long period of time. In 2010, approximately 26,000 tons of coffee beans were imported from overseas, while about 50,000 tons of coffee beans were produced in China (WANG, H. 2010; YUNNAN COFFEE ORGANIZATION 2012), resulting in a per capita consumption of 63.3 of green coffee beans in 2010. Compared with South Korea's 1 kg consumption per capita (LEE, S. 2011), the Chinese coffee market seems to have a huge potential. The

growth of the coffee market (Figure 4) is related to external demand factors like the influx of foreign business investments, expatriates living in China, and tourists from the rest of the world. It is also related to internal wealth factors such as the growth of affluent and Western-minded young and middle-aged consumers with growing spending power and an appetite for western and luxury brands that is often associated with success in the prosperous cities (ADAMY 2006; CHEN, Z. 2005: 6-7). The average age of a millionaire is 39 years in China, while 43 is the average age for a Chinese billionaire (HU, R. 2009). The market survey conducted by LANNA CAFE (2008) shows similar results. Among coffee drinkers, young people (under the age of 25) accounted for 41%, while the middle-aged group (from 25 to 40 years old) was 52%.

Figure 4: Coffee and tea markets in China



Source: Business Monitor International (2009)

Instant coffee

With less experience in coffee brewing, people in China are used to drinking instant coffee. Instant coffee is popular due to its relative low price and simple operational procedure. In 2007, instant standard coffee ranked 97% in the total coffee sales. Only 3% market share was left for fresh ground coffee and fresh coffee beans (EUROMONITOR INTERNATIONAL 2008). Instead of the pure coffee taste, consumers prefer a moderate flavor with a lot of creaming. The favorite instant coffee product is the 3-in-1 package, namely the powder mixture of sugar, milk and coffee powder.

⁴ Interview with officers from Agricultural Bureau of Yunnan Province (16.10.2009)

A few big coffee companies have successfully controlled the domestic market. Nestlé (Nescafé) and Kraft (Maxwell House) occupy about 85% of the market shares (Figure 5). The price of Nestlé instant coffee is slightly higher than that of Maxwell. For example, the average price of 200 g Nestlé instant black coffee costs about 8.1 Euro in Guangdong (CHEN 2009). While canned coffee drinks in different flavors are gradually being accepted by the young generation, coffee machines and pods are still too expensive and unaffordable for most Chinese (SURVEY AND REVIEWS 2008: 7).

Figure 5: Coffee company shares 2003 – 2007

Coffee company Shares						
% retail value						
Company	Brand	2003	2004	2005	2006	2007
Nestlé	Nescafé	54,0	54,1	54,0	53,6	54,6
Guangzhou Kraft	Maxwell House	29,4	28,8	32,5	33,7	35,2
Dalian UCC Ueshima	UCC	2,2	2,1	2,1	2,1	2,1
Jiangsu Mocca Food	Mocca	1,6	1,6	1,6	1,6	1,6
Shantou Gold Roast	Bencafé	1,3	1,5	1,3	1,3	1,3
Hainan Haikou Lisheng	Lisun	1,1	1,1	1,0	1,0	0,9
Changzhou Super Coffee	Super	0,6	0,6	0,5	0,4	0,4
Tsit Wing Coffee	TW, Colcafé	0,5	0,5	0,4	0,4	0,3
Guangdong Aces Food	Aces	0,2	0,2	0,3	0,3	0,2
Others		9,1	9,6	6,3	5,5	3,3
Total		100	100	100	100	100

Source: Euromonitor International: Country Sector Briefing Coffee – China May 2008

Case 1

Nestlé/ Nescafé in China (Swiss)



In the 1980s, Nestlé was introduced to the Chinese market with heavy advertising including sponsoring, TV, radio, and print ads. Nestlé markets different types of instant coffee in China, such as Nescafé 1+2, Nescafé Rich, Ice coffee and Nescafé. With the expansion of market shares, the localization of its products is also performed successfully. Nestlé has instant coffee production factories in Guangdong, China. It has set up a purchasing department in Yunnan, which is the only Arabica coffee plantation province in China. The first target group, young consumers aged 18 - 35, was narrowed down to the 18 - 25 year olds. University students have become the core consumer group. Even though not yet as affluent as young professionals, they are seen as the future leaders. Nescafé cooperates with university coffee shops in major cities to promote coffee sales. It aims to 'partner with university students when they study, when they surf the Internet, when they chat with friends in their dormitory rooms, or when they want to enjoy a moment of quiet reflection alone.' Nescafé was voted the 'most loved coffee brand' among university students in China for the second time in 2007.

Source: Euromonitor International (2008), www.Nestlé.com.cn

International coffee chain shops

A café culture is emerging rapidly in the larger and wealthier coastal cities. Coffee consumption is also rising in urban areas, while rural regions still show limited interest. The growing affluent young generation with increasing purchase power and an appetite for premium brands creates the opportunities for international coffee chains. In the coffee shop retail market, there are two major consumer groups. The first group is the growing middle class population in big cities. To them, coffee represents a part of modern lifestyle and Western culture. They like to experience a so-called “hip lifestyle”, and drinking coffee is regarded as being trendy and sophisticated. As they consume more, their taste level gets matured, and instant coffee can no longer satisfy them. They want a higher quality coffee that offers better taste characteristics like acidity, body, aroma and flavour. Different fresh coffee drinks from coffee shops can cater to their needs. Drinking premium coffee has also become a symbol of social status. The second group of consumers is the younger generation, born between the 1980s and 1990s. Most of them are still students or just starting their careers. Financially, they are not as well off as the first group. But their consumption power cannot be underestimated because they like to be considered as the trend setters and open minded to anything new. They are also more self-confident and intent on enjoying their lives more than other generations. Coffee shops target this group of young consumers, but the prices are relatively high. However, these shops are increasingly establishing a niche markets by offering a variety of experiences to their customers at a premium price such as a place where people can do social networking and be entertained. Drinking fresh coffee is also becoming more popular. Many coffee shops are enhancing their services to build up consumers’ loyalty. This includes moving to better locations, regulating opening hours, improving the use of a common identity, having attractive store designs and offering an interesting assortment. Due to their brand names, several coffee chains have enjoyed a thriving business in the past years, such as Starbucks from America, Blenz Cafe from Canada, Manabe from Japan and UBC from Taiwan.

Starbucks aggressive marketing strategy caused a huge controversy in China when they opened branches inside the Forbidden City and Great Wall, which are UNESCO world heritage sites. The conflict was settled amicably in the end. Chinese President Hu once made a remark during his official visit to the United States in April 2006 that ‘If I can find the time, I will visit a Starbucks in BeiJing to have a cup of coffee (SINA NEWS 2006)’.

In 1999, Starbucks opened its first coffee shop in China. After 13 years of development, Starbucks announced plans to grow from more than 500 shops in 2012 to 1,500 by 2015 (WHITE 2012). In Shanghai alone, there are 138 shops. Howard Schultz, chairman of Starbucks Corp announced that the company's goal in China is to make it the second largest Starbucks market in the world, right behind the USA market (SANCHATHA 2010). The company's high pricing strategy for specialty drinks make its Chinese outlets more profitable per store (Table 2). The high prices do not stop people from visiting the cafes. On the contrary, holding a Starbucks logo paper cup in public is now seen as a status symbol, a way to demonstrate a personal sophistication and a luxury lifestyle to Chinese middle class and young generation (REIN 2012). Starbucks has also built up a remarkable customer loyalty. A Chinese student even questioned the progress of his hometown development asking whether the town had a Starbucks coffee shop in its internet blog (ZHANG, J. 2011). It became a controversial topic and caused heated discussions about Chinese urban development and the presence of the American company. The incident ended with a blog withdrawal and public apology by the student, as it was considered to be an improper comment in Chinese society.

Table 2: Comparison of three coffee shop chains.

Name	Coffee Price (Euro)	Management Mode	Features
Starbucks	2,2-3,7	Direct-sale store	<ul style="list-style-type: none"> – Brand advantage – Good management capacity – Strong financial capacity
UBC	2,8 – 6.8	Franchise store	<ul style="list-style-type: none"> – Localization – Great variety in food and drinks – Catering different customer needs
Blenz Cafe	2,0 – 2,6	Direct-Sale and Franchise store	<ul style="list-style-type: none"> – Relative low price – Flexible management

Source: Lanna Cafe (2008), Li, J. (2012), Huang and Huang (2009), Chen, Z. (2005) and own illustration.

Starbucks has already been expanding its product lines away from coffee and has dropped the word coffee from its logo (BBC 2011). To fit the local taste in 2008, it offered two kinds of black tea. Since 2010, 7 types of tea have been added into its beverage list. Moreover, it sells the local food

variety like rice dumplings and moon cakes during holidays and festivals, which have proven to be a good business decision (LI, J. 2012). Starbucks' rapid business expansion is challenging the market shares of other young coffee shops, such as Blenz Cafe's. Blenz Cafe was popular in Guangzhou, the capital of Canton province. One of its outlets had a record daily sale of 400 cups. Later, Starbucks opened new stores close to Blenz Cafe. Some Blenz coffee shops failed to compete and had to be shut down or be relocated. Coffee restaurants, like UBC, are set up to cater wider customers' needs by offering drinks and serving food. Besides 9 different types of coffees in the menu, there are 8 types of tea and 17 different juices. Over 100 dishes and soups are offered. Although the price is considerably high, the UBC business is doing well by catering to meet the needs of different customers.

Case 2

Starbucks in China

It is not a cup of coffee but a cup of Starbucks.
Kong, L.

Starbucks started its Chinese coffee business in 1999. It offers fresh coffee and food service for in-store and take-away consumption. Its characteristics are good service, convenient locations and relaxing environment. It provides a place to meet and relax within the community and embodies a new kind of modern living and attitude towards life. Starbucks authentic coffee culture and unique Starbucks experience resonate deeply with the needs and aspirations of Chinese consumers from all walks of life. There are 350 stores in 26 cities in mainland China. In Shanghai only, there are 64 Starbucks coffee shops. Just like Howard Schultz, chairman of Starbucks Corp mentioned, the company's goal in China is to make it the second largest Starbucks' market in the world, right behind the North American Market.

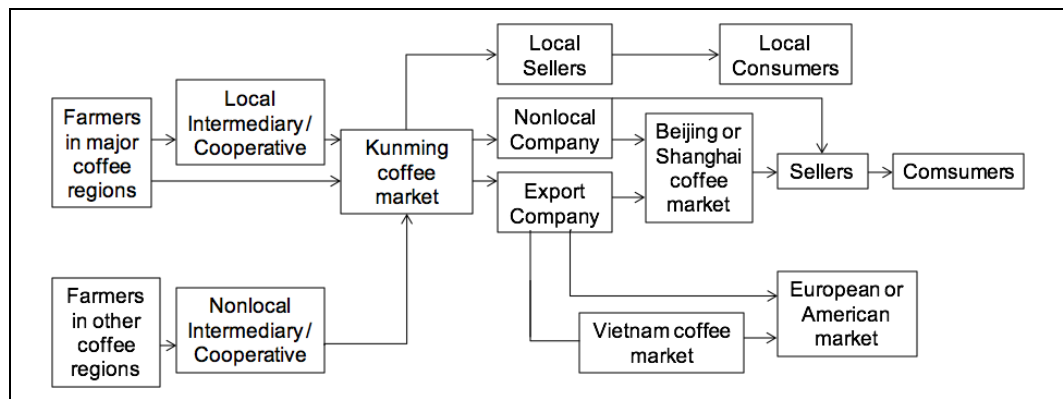
Source: Euromonitor International (2008), www.starbucks.com (2012a)

Local coffee shops

It is difficult for local coffee shops to compete with big coffee chain companies (CHEN, Y. 2009: 9). Those coffee chain stores have overwhelming superiority in capital, management and logistics, typified by a local coffee shop owner's statement: "Starbucks occupies almost all the good locations, private coffee shops have few opportunities" (XIONG, X.

2007a). Furthermore, store rent, labour cost and attendant expenses are gradually increasing. The income of coffee sales can hardly compensate the costs for many local coffee shops. To deal with the difficulties and attract more customers, specialization is a general development direction. Many coffee shops offer different programs, such as providing additional entertainment, extending opening hours, enriching the assortment of food and drinks, offering bar and snack services and having attractive store designs and identities (CHEN, B. 2012; WANG, Z. 2012). For example many coffee shops in Wuhan provide extra rooms for playing cards and playing majhong with food services. This achieves certain success and a shop owner stated: “the income from entertainment contributes half of our trade profit” (CHEN, B. 2012). To further reduce costs and increase operational space, many local coffee shops prefer to use coffee from Yunnan (Figure 6). Domestic coffee production and trade have a close interrelationship. The situation of Yunnan coffee industry is important for the development of specialized coffee shops.

Figure 6: Coffee marketing channels in Yunnan, China



Source: Own illustration (2012)

3.2 Yunnan coffee production: a proper quality

Yunnan is the only province in China where Arabica varieties are grown (poorer quality Robusta is grown to some extent in Hainan and Fujian)⁵.

⁵ Coffee belongs to the genus *Coffea* (BERTHAUD and CHARRIER 1988; COSTE 1992), which is diverse and reported to comprise about 100 species (PEARL *et al.* 2004). However, only two species, namely arabica (*Coffea Arabica* L.) and robusta (*Coffea canephora* Pierre) are under commercial cultivation (RAINA *et al.* 1998; HERRERA *et al.* 2002; STEIGER *et al.* 2002; PEARL *et al.* 2004). Arabica, the highland coffee, accounts for 60-70% of the global production while robusta coffee is more adaptable to lowlands and contributes the remaining 30-40% (ANTHONY *et al.* 2002). Arabica

Yunnan in Chinese means ‘Clouds in South’. Because this name elegantly describes the beauty of nature, many coffee companies use it in their advisements and create story lines in their marketing strategy. The Yunnan coffee history can be traced back to 1904. The first coffee tree was planted by French Catholic missionaries in BingChuan, Yunnan. In 1914, coffee was reintroduced to Yunnan Dehong region by the Catholic leader from JingBo, the ethnic minority group from Myanmar. Its history of coffee plantations in this region began in that year. Although the small-scale coffee farming by minority groups had almost no economic or political influence, it created a specific coffee culture and benefited the local coffee industry in the long turn.

3.2.1 The history of Yunnan coffee industry

Although coffee has been grown in China for 100 years, large-scale commercial coffee production in China is a relatively recent phenomenon⁶. There were two phases of development in the Yunnan coffee history. The first phase was in the mid 20th century with a strong political intention. In 1949, the communist party took power in mainland China. It encouraged the Yunnan farmers to plant coffee and to export to the former Soviet Union. By the end of the 1950s, the alliance between China and the former Soviet Union was broken. Coffee exports were used to repay the debts of China to Russia. At that time, the Arabica coffee varieties were Typica and Bourbon, which were originally introduced by the Catholic mission. In this period, political factors dominated every decision-making process. The government intervened in the first wave of coffee production, and the cost-benefit relationship was not taken into consideration. Therefore, technical problems were ignored. Coffee leaf rust disease (*Hemileia vastatrix*) is a typical example and was one of the major technical issues. The disease is not fatal for coffee trees, but it has spread throughout all coffee growing countries. The damage afflicted is due to the loss of photosynthetic activity in the diseased leaves, and the following premature leaf-fall. This defoliation can be massive in the case of major attacks, and a die-back of the branches follows. Repeated attacks weaken the plant (COSTE, R. 1992). The disease causes up to 10-40% of productivity losses in coffee beans (SILVA, M. 2006), and reduces the economic efficiency of the coffee industry. The Arabica species are particularly sensitive (ILLY, F. 1992). As a result, the

coffee produces superior quality coffee but its yield is very low, often constrained by disease and pests (AGWANDA *et al.* 1997; PRAKASH *et al.* 2002).

coffee plantation range was limited to 4,000 hectares after the first development wave in the 1950s.

The second phase began in the 1980s with the new variety S288 introduced from India. In 1986, it was officially introduced and promoted in Dehong and Baoshan regions by the Dehong Tropical Agriculture Science Institute, a subordinate body of the Agriculture Ministry. The institute is responsible for relevant agricultural studies, such as the development of coffee farming technology and varieties. The second phase was less politically and more economically motivated. Due to the great economic benefit of a variety resistant to coffee rust, it was rapidly introduced in most of the coffee regions in Yunnan. However, the development was eventually threatened again by coffee rust after about 8 years. S288 became sensitive to the disease and was less economically attractive. Therefore, the Catimor varieties were imported from the CIFC in Portugal in the 1990s by Dehong Tropical Agriculture Science Institute. Besides the feature of rust disease resistance, the high productivity demand is another reason for the introduction of these varieties. In addition the unique natural environment and great nature quality factor in Yunnan were largely ignored in the history. To research the potential of Chinese coffee, it is important to have an overview of local coffee production and its influence to the related environment.

3.2.2 Natural environment and coffee farming in Yunnan

Yunnan is a highland and plateau province in China, with the Tropic of Cancer running through its Southern part. It is divided into two topographic areas (Eastern part and western part). The eastern part is the Yunnan highlands, with an average altitude of 2000 m, and consists of low mountains and circular hills. The west has transversal mountains and deep valleys, with large altitude differences. The average altitude in the developing countries and North part is 1500-2,200 m and 3,000-4,000 m respectively. Only on the Southwest border of Yunnan, the terrain is relatively flat. The areas are located between the sub-tropical and tropical zones.

⁶ Various development projects have attempted to improve coffee production in Yunnan including a UNDP project with the local government which started in 1988.

Figure 7: The Yunnan province map



Source: www.cloud-south.com (2008)

Coffee can be generally planted between latitude 22°N and 26°S (DESCROIX and WINTGENS 2004). There are a few coffee areas outside these limits, including an area in Parana in South Brazil with low latitudes (20° to 23°S) and low altitudes (between 600 and 800 m) (WRIGLEY 1988; COSTE 1992). But almost all coffee plantation regions in China, namely Dehong, Baoshan and Simao, are above latitude 22°N (Figure 7). Especially the coffee plantations in Nujiang valley can reach latitude 25.5°N. This world record is due to the unique topography and climate of Hengduan Mountains. Generally, from May through October, the weather in China is under the influence of the Pacific Ocean monsoon with predominantly Southeast winds. In the remaining months, cold and dry air masses of the Northeast branch of the monsoon circulation dominates weather conditions. However, the main part of Southwest China, especially Nujiang valley, is not influenced by the Southeast monsoon in summer but receives precipitation from the Southwest monsoon (the ‘Indian monsoon’) (THOMAS 1997). Because of the obstruction phenomenon of the Yunnan-

GuiZhou plateau (DUAN *et al.* 2002) and the crash with the local west air masses, the dividing line, the so-called kunming quasi-stationary front, is formed and alternates seasonally between 102 and 106 °E (THOMAS 1997). During the winter, dry and warm western air masses in the west are separated from the cold and humid eastern air masses in the east (ZHANG, K. 1988) (Figure 8). The whole valley is well protected by the mountains around it. Its central region has humid (sub) tropical conditions. The unique location contributes to a positive effect on coffee cup quality (CHEN, L. *et al.* 2008: 412).

Figure 8: The cocoon effect in Yunnan



Source: Own Illustration (2008)

However, the limited varieties provision hampers the marketing potential of Chinese coffee. Today, most of China's coffee comes from the Catimor system, which are resistant to coffee rust disease. In almost all Arabica plantation regions, Catimor varieties are dominant. Although the varieties present a reliable quality, many consumers and trade companies believe in the traditional Arabica types such as Bourbon and Typica (CHEN *et al.*

2008). While the coffee quality is suspected accepted? In the market, the planting area and productivity are rapidly increasing (Table 3).

Table 3: Statistics of coffee production in Yunnan

Year	Area (hectares)	Productivity (tons)	Output Value (Million Euro)
2005	18,100	25,600	3,8
2006	18,400	25,399	3,9
2007	20,333	27,951	4,4
2008	24,300	32,888	5,7
2009	30,100	37,286	6,7
2010	43,000	49,439	10,5

Source: Yunnan Province Development and Reform Commission et al. (2011)

Compared with Brazil (1,950,000 tons) and Columbia (540,000 tons), productivity is low in Yunnan. In 2010, it was only 0.65% of the global Arabica coffee production (ICO 2012e). From a global perspective, the Yunnan coffee industry is not very representative. However, it is crucial for Yunnan, the fourth poorest province in China with 94 percent of the population living in mountainous areas (CHINESE ACADEMY OF SOCIAL SCIENCES 2012). In Yunnan, per farmer income was 4,711 RMB in 2011 (State Statistics Bureau, 2012). Compared to 6,977 RMB per farmer income in the rest of China, the income gap is wide (STATE COUNCIL CHINA 2012). Coffee is the fourth biggest agricultural commodity in Yunnan after tobacco, sugar cane and tea. The development of coffee farming also promotes the related sectors of post-harvest process. There are about 50 peeling plants with a maximum capacity of 200 tons and 150 plants with 200-500 tons. For dehulling, there are about 30 facilities with maximum 200 tons and 13 plants with 200-500 tons processing capacity. More than 1.5 million people participate in the coffee industry. In regions where coffee trees can be planted, coffee plantations are the first option for local farmers⁷. However, relevant economic contribution can only be realized in the trade market. Farmers' livelihoods can be improved when coffee sells at a profit.

⁷ Interview with the officers from Agricultural Bureau of Yunnan Province (16.10.2009)

3.2.3 Coffee trade in Yunnan

Although there are different ways to handle the local coffee production, several 'Lead Market' enterprises dominate the market:

Nestlé Coffee Company: Nestlé Coffee Company deals directly with individual smallholders to shorten the supply chain and reduce overhead costs. For over two decades, it has managed its coffee business well in China. To solve the problems of coffee rust disease, Catimor coffee varieties were introduced in Pu'er region. To guarantee a basic good quality for its instant coffee, the company offered free technical assistance, training and distributing handbooks to farmers who were not familiar or were inexperienced in this type of trade when it first started in 1989. The training course usually focused on agronomic practices and was held in the villages. A training and demonstration centre was also built to facilitate the training. This program became popular: by 2007, Nestlé had held 66 free programs and trained over 2,000 local coffee growers (ZHANG and DONALDSON 2008: 15). In recent years, farmers have been able to apply and choose the training topics themselves. Although the training style has changed, at least 15 villages took the course in 2010 and established coffee plantations (DING 2010).

With the participation of the Nestlé Coffee Company, productivity and expansion in coffee plantation areas reached a new level. For example, Pu'er region was originally a traditional tea plantation area. It has now become one of the largest coffee regions in Yunnan and a raw material production base, providing a steady supply for Nestlé's instant coffee processing facilities in Dongguang, which have been built since 1992 for the domestic market (ZHANG and DONALDSON 2008: 15). A stable supply and demand relationship between Nestlé and the farmers has developed despite the fact that there is no contract to bind the rights and obligations for both sides. Coffee farmers call Nestlé service department directly to check the current coffee price and to bring their coffee beans to its purchasing station (WANG and LI 2009: 47).

The buying process in Nestlé is standardized and can be completed in about 30 minutes. The farmers' coffee beans are tested, repacked and marked for quality control. Samples are also collected for cup testing. If the beans pass the basic quality test at the purchasing station, the money is remitted to the farmers' bank accounts within a few days (DING 2010). In the entire Yunnan province, Nestlé has the power to affect local coffee production with its huge buying volume. In 2012, it purchased about 10,500 tons of beans from Pu'er region, nearly 33% of the local coffee output and 15% of

the total output in Yunnan (YUNNAN COFFEE GUILD 2012). Although it is usually not the highest price bidder, many local farmers prefer to deal with Nestlé as a stable business partner to reduce the risks in their overall agricultural production.

Starbucks Coffee Company: Although the history of Starbucks in Yunnan is not long, the development is systematically and rapidly in progress. A significant feature in its sourcing is its utilization of institutional resources. Starbucks does not have direct contact with private companies or individuals, but rather through the governments at regional and provincial levels. The government coordinates and supports its relevant logistic supply activities. Although Starbucks announced that it will invest in direct coffee production in Yunnan, the company has never done so in the past (STARBUCKS 2012b) and still tends to focus on its retail business. Many services of logistics are outsourced to reduce the overhead costs. The company and its contractors enter into written agreements and legally secure both parties' business cooperation and obligations (Table 4).

Table 4: The development process of Starbucks in Yunnan

Time	Activities	Achievement
2007	A round trip in Yunnan to collect samples of cup testing	The result of cup testing failed.
2009	A meeting with relevant in Yunnan Agricultural Bureau	Starbucks rejected the purchasing advice from local coffee companies and decided to plant coffee by themselves. A round trip was made again later and found the proper plantation location with the selected government's assistance.
2010	A meeting with Pu'er regional government and Yunnan Agricultural Academy	A cooperation memorandum in Letter of Intent was signed.
2010	A cooperation agreement signed by Starbucks and Cash Crop Research Institute in Baoshan region	Research Institute is responsible for coffee seeding and regional comparison, experiments with four varieties introduced by Starbucks
2012	A cooperation agreement signed between Starbucks and Ai Ni Group in Pu'er region	A joint-venture will be established with 51% shares for Starbucks and 49% for Ai Ni Group.

Source: Chang (2010); Starbucks (2012b); Zhang, X. (2012); Ma (2012) and own illustration (2012)

Hogood Coffee Company: Hogood Coffee Company is the largest local enterprise in Yunnan. With credits from state development banks and project funding from the local government, it built up production lines for an instant coffee production of 10,000 tons in 2011. To support production,

it has two management arrangements with the local farmers to obtain coffee beans, namely minimum price contract and leasing land. In the harvest season, small teams go to the villages and buy coffee fruits according to the minimum price contracts signed with the farmers. Farmers are immediately paid in cash. Although the price is usually low, as the farmers put it: the income can still cover the cost, and price stability and convenience are often more important to the farmers (DING 2010). Leasing land means that the company rents farmers' land to produce coffee for a long period of time. Farmers can sign a work contract and become a salary employee. At the end of the year, they receive the rent payment. This trade mode presents a stable relationship between both sides. To control the coffee quality, the company provides specific technical guidance, logistic support, and post-harvest processing. The level of product quality has significantly improved due to quality standardization. The unexpected problems caused by workers' mistakes during the process were largely eliminated (SIEBENBROCK 2010: 83). The system has improved the sellers' confidence with respect to product quality, and establishes a long-term business partnership between buyers and sellers, since the sellers know clearly what they will receive and how much they will pay in the trade. Standardization also extends to product specification, thus benefiting production efficiency. Each processing phase is specifically handled and is responsible for a particular group of skilful workers so there is less chance of defective products.

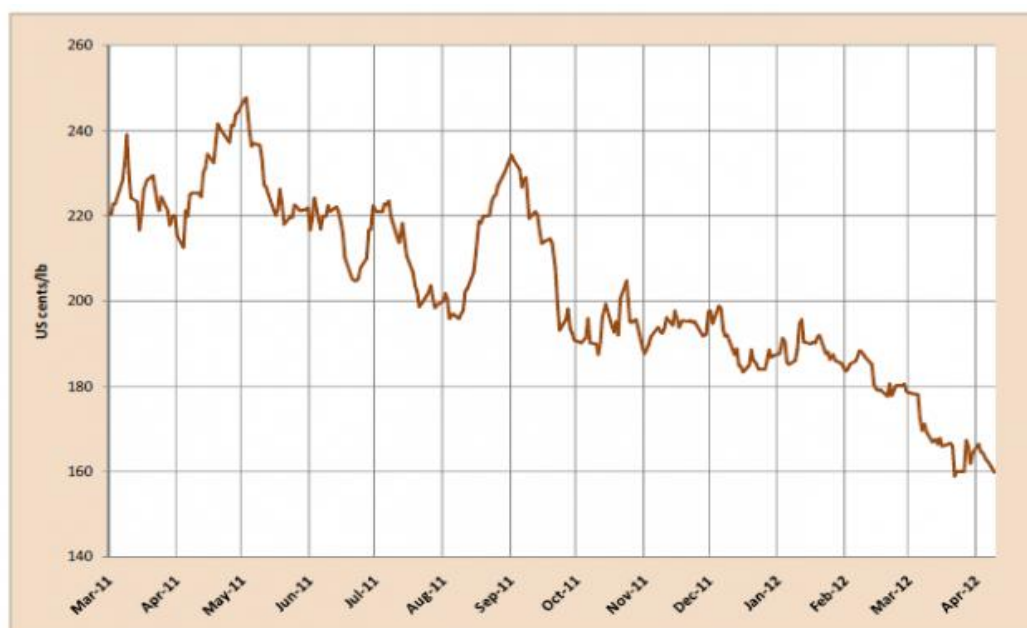
Independent of trading method, coffee farmers do not have price control. Although the minimum price contract can guarantee a stable income, it fluctuates every year according to local market situation. If the market price sinks for a long period, benefits for farmers cannot be guaranteed. However, farmers often obtain a higher price through spot trading. They can hardly cope with the market risks and make right decisions if the coffee price fluctuates strongly.

3.2.4 Coffee crises

A coffee crisis emerged in March 2012 when green coffee bean prices sank from nearly 4 Euro to 2 Euro per kg. At the end of the buying season, there were about 20,000 tons of unsold green beans in Yunnan (YUNNAN COFFEE ORGANISATION 2012). When the price dropped to 1.6 Euro, coffee farmers' livelihoods were threatened (HU, L. 2012). The crisis was caused by two factors. The first factor was market speculation. In 2011, the world coffee prices hit a 14-year high (CNN 2011). Though the coffee price usually follows the fluctuation of the New York coffee price, the trading price in

Yunnan was about US. 30 cents lower. There was a poor harvest in 2011, due to dry weather, and coffee productivity was reduced by almost 20% (FANG 2010). Not only some intermediaries, but also major companies in the market could not fulfill their buying contracts, because a lot of coffee intermediaries and farmers wanted to hold onto their stocks as they expected a higher price. In the end, prices reached nearly 4 Euro per kg, which was 60% higher than that 2009 before the crash. Many intermediaries were hit by the speculation and decided to leave the coffee business because of the risk of high price fluctuation. The market situation started to change in 2012, and world coffee prices began to decline from their peak in 2011 (Figure 9).

Figure 9: ICO coffee composite indicator prices in 2011 and 2012



Source: ICO (2012e)

Many coffee farmers did not sell their coffee and expected that the prices would return to the 2011 level, but this did not happen. They ended up with a loss. Another factor that triggered this crisis was the reduction in demand. Some international coffee companies reduced their purchase orders. For example, the Neumann Coffee Group usually bought about 20 containers a year. In 2012, it only ordered one container. In March, Nestlé decided to close its buying station two months earlier, since it had met its purchase target. To stop the price downturn and further losses by the farmers, the Pu'er regional government negotiated a deal with Nestlé to increase its order to 1500 tons more than it had originally planned. The Yunnan Coffee

Association also approached two relevant coffee companies and asked them to buy more coffee beans.

Coffee crises prove it is difficult to predict market supply and demand. As a major promoter of the coffee plantations, the government was primarily responsible for the excess local coffee bean supply. It should consider the variables of global market volatility and prepare effective strategies to handle an unexpected crisis in its state planning of the local coffee economy. The provincial government has encouraged the expansion of coffee production with a planned investment of US\$ 450 million up to 2020, and is promoting coffee as a key economic pillar for province growth (YUNNAN PROVINCE DEVELOPMENT AND REFORM COMMISSION *et al.* 2011). The state envisions that the area of land devoted to coffee production will increase 5-fold from 20,000 ha in 2007 to around 100,000 ha by 2020, with a gross output value of US\$ 5 billion (YUNNAN PROVINCE DEVELOPMENT AND REFORM COMMISSION *et al.* 2011). Investments will be spent on training, land conversion, soil improvement, and construction of research centers (BLACKMORE and KEELEY 2012: 93). With the strong support of the local government, the plantation area is increasing rapidly. In 2012, the area reached 57,000 ha at a 27% growth rate compared with that in 2011. Coffee trees first bear fruit in the third year. The peak of productivity usually starts in the fifth or sixth year. The beneficial effect of expanded plantation area will theoretically emerge in 2015 (YUNNAN COFFEE ORGANIZATION 2012). A serious oversupply situation will possibly reappear in 2017, if the demand cannot be increased at the same rate. Besides quantity, quality is a determinant factor in coffee marketing. As the Chinese consumers' taste improves, they will demand quality over quantity.

3.2.5 Coffee quality management

Coffee quality can be classified by cup testing and physical features. Cup testing is an organoleptic method to precisely identify the quality of the coffee. Several coffee samples are tested at the same time. Beans are ranked by aroma, taste and mouthfeel. Based on the results, different kinds of coffee can be directly used or mixed to achieve a rounded quality improvement. Although cup testing is reliable, it needs relevant equipment, experts and is time consuming. The first quality selection is often based on the physical features of the coffee beans.

Physical features relate to state, aspect or appearance of the coffee beans such as weight, volume, size, shape, color, solubility, moisture content, texture, etc. From the tree to the cup, the various physical characteristics of

coffee in its different forms play an important role in the way it is treated and in the design of equipment to process it (ICO 2012a). In Yunnan, local researchers prefer to use three indicators, namely total dry weight of parchment beans / fresh coffee fruit weight (D/F), dry weight of 1,000 parchment beans (1,000 B) and dry weight of 17-size parchment beans/total dry beans weight (17 size/D). From the D/F ratio, the output of dry beans can be estimated from the weight of fresh coffee fruit. It's an important physical character for the quantity, while 1,000 B index is linked to quality. A heavier bean weight refers to a higher quality (NJOROGÉ 1998; CLIFFORD and WILLSON 1985). Some leading companies, like Nestlé and Hogood Coffee, prefer to judge the quality by the bean size, although the relationship between cup quality and bean size is still unclear. Beans of 17 size, i.e., a diameter of 17/64 ins (6.75mm) can fetch a higher price in Yunnan.

Figure 10: ICO price April 2012 and procedures in the USA coffee market

Day	ICO composite indicator	Colombian Milds			Other Milds			Brazilian Naturals			Robustas		
		Market		Group indicator	Market		Group indicator	Market		Group indicator	Market		Group indicator
		USA	Europe		USA	Europe		USA	Europe		USA	Europe	
02-Apr	166.50	224.25	219.81	221.85	200.88	199.20	199.87	184.25	191.94	190.10	113.25	100.92	102.89
03-Apr	164.61	222.25	218.54	220.25	199.63	196.43	197.71	183.25	187.33	186.35	112.75	100.85	102.76
04-Apr	164.43	221.75	220.15	220.89	199.13	196.81	197.73	182.75	188.94	187.46	111.25	99.02	100.98
05-Apr	162.84	219.00	216.86	217.84	198.13	194.39	195.88	181.00	185.69	184.56	111.92	99.25	101.28
06-Apr	162.34	Holiday	216.29	217.27	Holiday	193.81	195.30	Holiday	185.15	184.03	Holiday	98.87	100.89
09-Apr	159.73	215.00	Holiday	213.87	193.50	Holiday	191.31	176.00	Holiday	179.47	111.92	Holiday	101.28
10-Apr	160.21	214.25	213.36	213.77	193.38	191.32	192.14	176.25	182.16	180.74	111.17	99.04	100.98
11-Apr	161.64	218.75	214.63	216.52	195.44	191.79	193.25	178.75	183.40	182.28	112.92	100.01	102.07

Group	Growth of coffee
Colombian Mild Arabicas	Colombian Excelso UGQ screen size 14
Other Mild Arabicas	Costa Rica Hard Bean
	Guatemala Prime Washed
	Honduras High Grown
	Mexico Prime Washed
Brazilian & Other Natural Arabicas	Brasil Santos 3/4 screen size 14/16
Robustas	Indonesia EK Grade 4
	Uganda Standard
	Vietnam Grade 2

Source: ICO (2012c) and (2012d)

It is necessary to consider the factor of coffee variety. Different varieties have a different organoleptic feeling. Cup testing is calculated in numbers, such as scores or ranks. Each variety has its specific flavor, although it may be ranked at the same grade with others. A proper agronomic practice, post harvest process and environment can optimize the quality of a coffee variety. But these factors cannot totally change its original organoleptic characteristics. In Yunnan, the varieties are almost identical. Most of them belong to the Catimor variety. Therefore, it is justified to use physical features to basically and conveniently classify the coffee quality. In the international mainstream market, physical features are also widely used to judge the quality and support related price announcement (Figure 10) according to the post-harvest process (dry or wet process), species (Arabica or Robusta) and country (Brazil, Columbia or Vietnam). In various countries, the standards of physical features can be slightly different. For example, Germany prefers the size 15 of Colombian coffee beans, while America likes the size 14 (Figure 11).

Figure 11: Different market standards of Colombia Mild Arabicas

Market	Growth of coffee
USA	Colombian Excelso UGQ screen size 14
Germany	Colombian Excelso European preparation screen size 15
France	Colombian Excelso European preparation screen size 15

Source: ICO (2012d)

Quality refers to all the features and characteristics of a product or service that bear on its ability to satisfy stated or implied needs (OECD 2012a). For agricultural products, CHEN (2003) defined six factors to access the quality, namely function, credibility, safety, suitability, economical efficiency and timeliness (Table 5). Agricultural products have a strong seasonal characteristic. Many of them have a short lifecycle. Therefore preservation, shelf life, storage, and transportation have to be taken into consideration. Damage is not absolutely forbidden, but only in an acceptable and controllable range. Efficient and adaptable products are competitive in the market, while local politics, religion, tradition, habits and climate situation can have a strong influence on quality judgement.

Table 5: *Quality character of agro-food*

Function	Credibility	Safety	Suitability	Economical Efficiency	Timeliness
<p>Exterior function: shape, condition, colour, lustre and aesthetics</p> <p>Utilization function: nutrition, organoleptics and preservative function of package</p>	Usability, reliability and maintainability in shelf life	Acceptable and limited damage for human and environment	Adaptability for natural and social environments	Affordability, cost efficiency and worthiness	Certain amount in agreed period

Source: Chen, Z. (2003)

For a long time, product quality was decided by the compliance to the original design standard. This perspective focuses on the opinion of supplier and the production route. The discrepancy between producer and consumer expectation is not taken into consideration. Nowadays, the economy is market-oriented and buyer-driven. Quality is an important issue to be observed from the perspective of trade in order to find a balance between expectation and provision. Its most important characteristics depend on user perspectives, needs and priorities, which vary across different groups of users (OECD 2012b). It covers not only the raw materials, but also the immaterial parts. To clarify relevant quality management, SIEBENBROCK (2010:86) concluded six points for producers to meet the demands of customers:

- A proper product or service,
- A suitable price,
- An appropriate arrangement of performance,
- A necessary amount,
- In an agreeable time,
- At a congenial place.

In Yunnan, most coffee beans are used for instant coffee. Due to the industrial process, instant coffee does not need a very high quality raw material, but rather a stable one. From the perspective of species, Arabica is good enough for instant coffee production. Several leading enterprises focus on standardization to ensure the stability of the coffee quality.

Hogood Coffee Company even buys fresh coffee berries, which are difficult to transport and preserve, to avoid possible incorrect post-harvest processing by the farmers, while Nestlé offers much free training to improve the farmers' technical skills. The coffee varieties are chosen according to productivity, disease resistance and other agronomic characteristics. Starbucks has a different approach to controlling coffee bean quality based on its own product requirements and market orientation. To maintain its quality standard it introduced four new coffee varieties to Yunnan, when they started coffee bean sourcing.

Since the major coffee companies invest a lot in the planting stage, the purchasing price is strictly controlled to compensate the cost. Though the price generally fluctuates with the international commodity price, the quality standards and criteria are defined by each company. The farmers do not have the right to set the price and quality standard but follow the requirement and guide lines set by the companies. The companies set the price level based on the requirements of their own quality standards. So this pricing structure has the advantage that they can set the price low enough to recover their investment costs. The price definitely depends on the coffee quality of the individual farmer. It is difficult for farmers to negotiate with companies, to enter coffee value chains and to have a proper profit compensation, especially when the few market leaders control a large part of the demand. Although some traders and coffee shop owners try to find specific coffee at a higher price offer, their demand is fragmented and limited. One container order is a basic starting number in the coffee trade. About 20 tons of coffee beans can be transported in a container, while a coffee shop in Germany on average uses 10 tons of beans a year and at least 4 or 5 varieties (Interviews with PIERCHACZEK, J. 2010 and 2012). Therefore, some coffee shops have to combine their demand to achieve the minimum order quantity. This niche coffee market is small and has a limited influence in the overall Chinese coffee development.

On the other hand, quality is not just a dimension of competition or comparison, but an object of collective understanding and negotiation (VALCESCHINI and NICOLAS 1995: 30). It can be explained in various realms, especially in concerns about health, environment, social construct, civic context, market mechanism and industrial procedure (RENARD 2003: 88; WATTS and GOODMAN 1997: 13; SYLVANDER 1995: 172-173), if its relevant common principles of evaluation or grading can present convincing arguments and concepts (EYMARD-DUVERNAY 1995: 45). To strengthen the confidence in product quality, various certificates have been

created and used (SIEBENBROCK 2010: 87). The validity of the certification depends on an independent organ that objectively ensures compliance with the standard (VALCESCHINI and NICOLAS 1995: 31). Due to the vital quality management and trust basis provided by certification (EBEL 2001: 139), fragmented demand can possibly be united to form a niche market and attract stable customer groups to achieve necessary trade amounts. The emergence of Fairtrade certification can not only create a reliable market demand but present the value of quality in different dimensions. To understand the quality concern in fair trade business, fair trade movement, Fairtrade certificate and related organ, Fairtrade Labeling Organization (FLO), are described in the following Chapter 4.

4. Fairtrade movement and certification market

It is important to mention that product quality can be defined by consumers from many dimensions (PELSMACKER *et al.* 2005: 363; RENARD 2003: 88). Ethical value can belong to product quality to some extent (LOUREIRO and LOTADE 2005: 129; SHAW and SHIU 2003: 1485; BIRD and HUGHES 1997: 159). Nowadays, consumers are willing to pay a price premium for products which address moral issues. In the market, there are many relevant certificates. Among them Fairtrade, with Euro 4.8 billion worldwide sales volume in 2012 (STATISTA 2013), is an important movement in terms of ethical considerations due to its crucial market share and specific requirements about social, socioeconomic and environmental development.

4.1 Fairtrade movement

4.1.1 Development history and current situation

Besides traditional trade models, the fair trade movement can be a possible development pathway for the improvement of small farmers' livelihoods through a continuous business relationship. Farmers are organised in the framework of a farmer's cooperative capable of entering the interregional market and paying a favourable price with a Fairtrade premium (GIOVANNUCCI and KOEKOEK 2003: 38). Based on a respectful, transparent and active communication among the participants of the fair trade movement, it aims to sustainably support the development of marginalised farmers, workers and their communities (FAIRTRADE FOUNDATION 2010a: 1). The opportunity is provided to the consumers in the developed countries to support, with moral consideration, the social, economic and environmental improvement of farmers and their villages in the developing countries (MURRAY *et al.* 2006: 180). By eliminating intermediaries, it shortens the supply chain and brings more benefit to producers. The fair trade movement aims to achieve sustainable development in terms of good price, improvement in farmers' yields and strong concern for their rights (FAIR TRADE ADVOCACY OFFICE 2011: 3). As well as monetary payment, producers, especially smallholder farmers, can receive various forms of training, information, healthcare, infrastructure and other services that are necessary to improve their productivity and livelihoods (FLO 2009). They are not just suppliers but also partners and trainees in the business. In some cases, partial short-term financial credit can even be provided to start and maintain the relevant business. Furthermore, the movement benefits not only farmers in developing countries, but also other participants, such as

relevant certification initiatives and their business partners. By considering the interests of all participants, it aims to become a sustainable business model.

Almost sixty years ago, the fair trade movement was started by religious organisations with the sale of hand-made products from developing countries (STECKLOW and WHITE 2004). Later, it began a cooperative relationship with alternative trade organisations (ATOs), such as Oxfam Organisation and Twin Trading. In the 1960s, 'Worldshops' participated in the movement and tried to sell certain products in the developed countries. The specialist shops are organised not only for the sale of goods, but also for educational marketing and information exchange for customers in the developed countries (TUOMELLA-MILLAN 2009: 32). Today, approximately 2700 worldshops exist, although sales in many are modest. They are usually managed by local associations with the assistance of volunteers (KRIER 2008: 27). Though the shops are commercial, their non profit character is significant (WORLDSHOPS 2012). In most cases, volunteers are necessary and undertake a large part of the work. In the late 1980s, the fair trade products were labelled and promoted by mainstream retailers, especially in supermarkets (FLO 2004). The changes seemed to bring other possibilities and successfully extend the movement of fair trade to more European countries, while the original marketing channels were maintained and remain important. From 1991 to 1994, fair trade products were gradually accepted and sold in Belgium, Switzerland, Germany, France, Luxemburg, England and Austria. Encompassing the changes, the business model tends to be market-oriented with reduced dependency on volunteer contribution. It led to the current success of the fair trade movement, since many companies are allowed to participate and become fair trade partners (KRIER 2008: 27). The fair trade market has fast grown. In 2008, the total volume of Fairtrade certified products was Euro 2.9 billion with a 22% annual growth (FAIRTRADE INTERNATIONAL 2012). Like Starbucks, McDonald's and Nestlé many big food and beverage companies have joined the fair trade movement and sell related goods with the guidance and support of fair trade organisations (THE GUARDIAN 2007; STARBUCKS 2012c; FAIRTRADE FOUNDATION 2010b). Some large international supermarket chains are also involved in the movement. In Germany Rewe, Lidl and Aldi offer Fairtrade products, while Wal-Mart participates in America. These chains have become a powerful driving force and contribute greatly to the enormous growth of the fair trade movement due to their strong financial capacity and broad marketing channels (OXFORD POLICY MANAGEMENT 2000: 38). Some companies have invested considerably to join in the fair trade

movement. They spend impressive capital and energy to improve their techniques, product quality and goods variety according to the principles of fair trade (KRIER 2008: 30). For example, Zotter chocolate company is focused on the concept of 'Fairtrade and organic' for its speciality chocolates, whereas the British supermarket chain Sainsbury sells only Fairtrade certified coffee, tea and bananas (ZOTTER CHOCOLATE 2012; FAIRTRADE FOUNDATION 2007). As a matter of fact, they contribute a lot to the market success of fair trade and bridge the gap between producers and their customers. The participation of commercial enterprises can have many reasons, such as market positioning, reaction to market demand, or social responsibility.

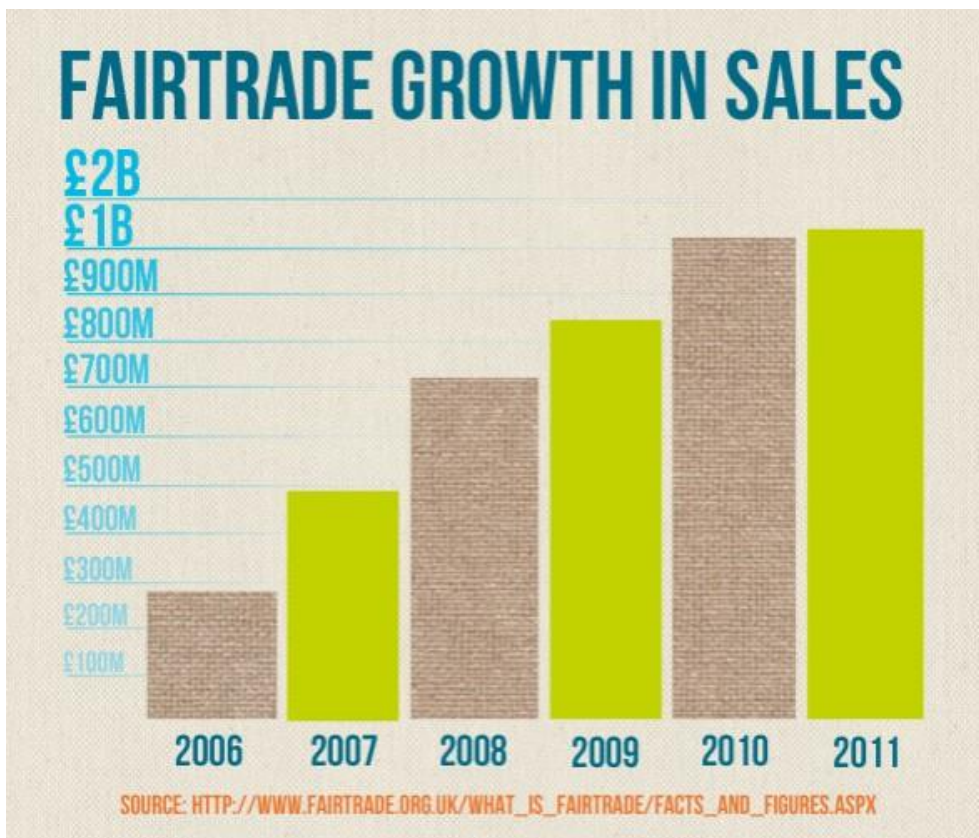
In the fair trade movement, there are five large active international networks in the consumer countries. Four are located in Europe, namely the World Fair trade Organisation (WFTO), European Fair trade Association (EFTA), Network of European World Shops (NEWS!) and Fairtrade Labelling Organisations International (FLO). Only the Fair trade Federation has its headquarters in Washington, U.S.A., and has a strong emphasis on the American and Canadian fair trade market. They generally have different types of members and various institutional structures. NEWS! represents Worldshops in more than 12 nations. EFTA is a collaboration of importing organisations, agencies and companies, while FLO is an umbrella organisation for national labelling associations and producer networks. However, it is difficult to completely avoid competition, since there are certain overlapping service areas. Since 1996, the European Worldshop Day has regularly taken place to increase the communication and coordination among the four major networks in Europe (KRIER 2008: 34). Various meetings were held to harmonise their work. Moreover, some fair trade networks have realised the importance of cooperation for the improvement of fair trade activities from the perspectives of politics, civil society and trade justice. With their support, the Fair Trade Advocacy Office was established in Brussels in January 2011, as a legally-independent joint initiative. Its main aim is to introduce the fair trade movement to different institutes and increase influence in all European areas (FAIR TRADE ADVOCACY OFFICE 2011: 3-5).

4.1.2 Impact and challenges of fair trade

The success of fair trade is remarkable. Even during economic crisis periods, it maintained the rate of market growth and is possibly starting to enter the mainstream market (Figure 12). Its products can be bought in

several major supermarket chains and group companies like Rewe, Lidl, Aldi, Starbucks and Nestlé. The effort and concept of fair trade is gradually being recognised and accepted by many people and organisations in the world. Some financing institutions, such as Triodos Bank, Oikocredit and Shared Interest, participate in and support the movement. In a socially and environmentally responsible way, they invest their funds and offer credits to organisations, producers and enterprises involved in the model of fair trade. Some institutions with clear governmental background also promote the development of fair trade. Good examples are the activities of the German Organisation for Technical Cooperation (GIZ) and the Federal Ministry for Economic Cooperation and Development (BMZ). GIZ assisted TransFair and FLO in the introduction of new brands, the expansion of product variety and the construction of marketing channels. In 2002, it cooperated with BMZ in a series of activities and trade shows to present the value of the fair trade model and attract the attention of German politicians and businessmen (GIZ 2012).

Figure 12: Fairtrade growth in sales



Source: Fairtrade Organisation (2012a)

In the meantime, several main challenges have emerged after the recent rapid development. Economic power in the market has made the situation

more complicated and difficult to fully assess. Critical media coverage increases the vulnerability of the fair trade movement, although it largely depends on the perspective from which it is looked at. Dependence is a topic which attracts much attention. Without external support and related funding, it is difficult for farmers' cooperatives to achieve the fair trade certification. A proper organisational arrangement and self-management also are important for relevant cooperatives to maintain the certification in a sustainable way (OXFORD POLICY MANAGEMENT 2000: 25). Many Fair trade organisations realize this and aim to raise farmers' management capacity. However, such capacity building is a long-term process and relies largely on the governance structure of various farmers' cooperatives. A certain proportion of farmers' cooperatives are dependent on the support and sponsorship of external institutions, organisations and their related projects.

Competition is another challenge. Relevant organisations have many similar characteristics. It is almost impossible to avoid an overlap situation in the fields of services, products and members. Though much effort is given to communication and coordination at the national, continental and global levels, tensions can always be found among most types of fair trade organisations in many countries. For example, Worldshops was the major promotion force in the fair trade movement and provided market access for the farmers. With the development of the fair trade market, they lost their former position. Fairtrade certified products can be bought in many supermarkets and outlets. Worldshops have to participate in a lot of commercial activities to generate interest and become the favourite place for consumers. Volunteers can also help to reduce labour costs. However, the shops are still under a lot of pressure, and the pressure generated by other fair trade initiatives worsens the situation. In recent years, the Network of European World Shops (News!) has lost four former members from France, Italy, Austria and Spain, who have preferred to integrate more actively into the International Fair trade Association (WFTO for now), Europe (KRIER 2008: 32).

For companies in the fair trade sector, the desire for a better market share raises the level of tension, especially when new importers and wholesalers join the market. Marketing services become more and more vital for success. Companies have to constantly sharpen their individual profile and establish greater brand and company loyalty. Market pressure hinders a timely flow of important information among relevant enterprises, though it is necessary to work together to promote the fair trade movement (OXFORD POLICY MANAGEMENT 2000: 31). Moreover, actions for short-term benefit

can possibly emerge which threaten the sustainable relationship with producers and the reputation of the fair trade movement. Such damage may exist over a long period. On the other hand, competition can be a useful way to improve management ability and reduce financial dependence. All fair trade organisations can benefit from it. From a macro-aspect, fatal competition does not exist inside but comes from outside, for example other eco or social labels are organised very much along the lines of the fair trade model, such as the Rainforest Alliance Certificate. To some extent, participants in the fair trade movement always want to avoid direct conflicts and aim to expand the volume of the market (FAIRTRADE FOUNDATION 2010a: 6).

In a tight market, competition tends to increase. Market growth is a good solution for fair trade. Although in some countries, fair trade is still a new concept and needs to establish its legal identity in local institutional frameworks, its global growth in recent years is obviously positive, especially in several new markets. In South Africa, Fairtrade certified products were consumed more than three times more in 2011 than in 2010. In New Zealand, sales rose by 24% in 2010 (FAIRTRADE NEW ZEALAND 2012). In the meantime, relevant organisations have to cope with more and more differentiated demand to sustain growth and guarantee their market share. They invest in the expansion of product range and quality promotion in terms of the application of organic and fair trade certificates. Such actions increase the need for greater capacity in terms of personnel, finances and organisational governance structure. Some potential weaknesses suddenly become significant in the volatile market. Quality is a typical problem, reflected well by coffee, a traditional and famous product in the fair trade business (GIOVANNUCCI and KOEKOEK 2003). Like other certifications, the quality of coffee in fair trade was not stable and constant in the beginning phase (RAYNOLDS, MURRAY and TAYLOR 2004: 1114). Moral value was the major marketing point to attract consumers. It is necessary to support poor smallholders in the developing countries and buy their products. Quality was not focused on, although it is a critical issue to successfully access a broader market. Now the importance of product quality is recognized. With considerable external support, relevant farmers' cooperatives focus on the quality improvement of certified fair trade products. Generally, fair trade coffee has achieved a remarkable improvement in cupping quality. In relevant cup testing competitions, more fair trade coffee companies can be found as prize winners. On the other hand, there is still operational space for quality improvement. Many coffee companies in the mainstream market are hesitant to introduce fair trade

coffee, since the ratio between price and quality is not always optimal. Sometimes, the price is too high for the corresponding quality. Proper quality becomes an important consideration to promote fair trade coffee in the mainstream market. It takes time to convince relevant traders and consumers. However, the difficulties faced by fair trade coffee are temporary and can be solved (RAYNOLDS 2002).

The involvement of large companies can be beneficial. They have great experience and various resources for efficient management and cost control. Based on the high production volume, there is more room for price reductions. Meanwhile, their broad marketing channels and strong financial capacity raise the possibility of further stable growth. Based on the cooperation with giant coffee companies in developed countries, many fair trade organisations can probably expand their sales volume to a new level, although it is difficult to achieve a stable business partnership.

Credibility is another main issue. It is the core value of the fair trade movement and a major attraction for its consumers. Sceptics fear small farmers will be gradually marginalized and filtered out if the movement enters the mainstream market focused on economic scale and advantage. In such a market, giant production organisations, with strong financial and human resource support, can obtain a dominant market share (MURRAY *et al.* 2006). Fair trade organisations may lose their principles and promises in the face of temptation. In recent years, a few big mainstream companies have raised consumers' suspicion when they participated in the fair trade movement. For instance, some NGOs complained about the minimum certified cocoa percentage of Nestlé's Fairtrade KitKat candy in the UK (BABY MILK ACTION ORGANISATION 2010), while other critics highlighted the German supermarket chain Lidl's violation of labour regulations in developing countries and overvalued public ethical claims (LABOUR BEHIND THE LABEL 2010). Furthermore, some opponents think there is not enough information about the management and distribution of fair trade premiums. They doubt whether the small farmers can really obtain the premium necessary to improve their livelihoods. Such scepticism threatens the sustainable development of fair trade.

Although the challenges for the fair trade movement are usually present in the market in the developed countries, the fundamental issue is related to farmers' cooperatives in the developing countries. The principles of fair trade have to be reflected in the producing countries and recognized by consumers. Credibility has to be proved in different agricultural production systems with specific social, economic and environmental contributions. As

an important and mature product, coffee has a long history in the fair trade movement.

4.2 FLO and its Fairtrade certification

The fair trade movement aims to support farmers' social, economic and environmental improvement in a sustainable way. Related certifications are introduced to ensure the achievement of purpose, attract stable consumers and regulate relevant value chains. As one of the most famous initiatives, FLO has significant representativeness. Its certification is a typical example to illustrate the whole operational process. In this section, FLO and its Fairtrade certification are introduced.

To present a clear description, two definitions have first to be made, namely accreditation and certification. An accreditation refers to 'the formal recognition by an independent body, generally known as an accreditation body that a certification body is capable of carrying out certification' (ISO 2012). It is voluntary with a clear guarantee. The performance capacity of relevant certification institutes is objectively inspected according to corresponding certification standards and principles when a body applies for accreditation. In 2007, FLO-CERT GmbH became an ISO65 accreditation body (FLO-CERT 2012). Certification is 'the provision by an independent body of written assurance (a certificate) that the product, service or system in question meets specific requirements' (ISO 2012).

4.2.1 Fairtrade Labelling Organization International (FLO)

Fairtrade Labelling Organisation International (FLO) is the biggest certification initiative in the world. To cope with the rapid growth and reduce confusion for various fair trade certificates, related fair trade organisations sought to bring more than 20 national labelling initiatives around the world under one fair trade mark and logo, which grants certificates to traders and inspects relevant products according to fair trade standards (DAVIRON and PONTE 2005: 5). In 1997, FLO was established for the coordination of different fair trade institutes and the preparation of major disciplines for an umbrella organisation in the fair trade movement. It exists in more than 20 developed and developing countries. In May 2007, three continental producer networks officially joined FLO and became members, namely the African Fairtrade Network, the Coordinadora Latinoamericana y del Caribe de Comercio Justo, and the Network of Asian Producers. They are responsible for the representation of the interests of farmers' cooperatives, direct communication with the labelling initiatives in

developed countries, and the facilitation of relevant certification activities. In 2008, Max Havelaar, Switzerland, accepted and applied the logo of FLO. All European fair trade organisations are officially unified in terms of fair trade labelling. Though the specific activities of fair trade are managed by local organisations, the meaning of FLO's establishment is remarkable obvious. The different aspects of the fair trade movement are comprehensively presented in the principles and purposes of FLO. With a clear intention, farmers obtain more power in the policy making process. For the fair trade consumer, a common logo can also increase brand recognition and loyalty.

However, the integration process is accompanied by many difficulties. Not every participant wants to unify with others and change its initial label. For example, TransFair Canada and TransFair USA still use their old logo, although a new one has already been introduced in the Swiss market. Meanwhile, the fair trade organisations in Oceania clarify their identities by combining their national names with the Fairtrade logo. The harmonisation process needs to be understood in the framework of the Fairtrade concept and a unified process of policy definition.

FLO consists of two organisations, namely FLO-CERT GmbH and FLO e.V. In 2003, FLO-CERT GmbH was established, and is in charge of certification performance and compliance criteria. FLO e.V. still exists and is responsible for formulation and correction of standards. As a non profit organisation, it coordinates different stakeholders in the value chain of Fairtrade, such as farmers' associations, labelling initiatives, traders and consultants. The definition of functions is a significant step in the history of FLO. As an independent certification body and limited company, FLO-CERT GmbH is responsible for the certification process and related monitoring (FLO-CERT GMBH 2012). Fairtrade activities can be found in 59 countries in the developing countries. Over 700 farmers' associations participate in the certification process with at least 17 certified products. Millions of workers and their families benefit from the business of Fairtrade. Through the cooperation with Starbucks, Fairtrade certified coffee is gradually entering the mainstream market, especially in the UK. In 2009, Fairtrade coffee accounted for 21.7% of the value of the British coffee market (FAIRTRADE FOUNDATION 2012b). Although new varieties have strong growth rates, coffee contributes a significant economic benefit and remarkable market share (Table 6). In the Netherlands and Switzerland, about an annual growth rate of 4% can be expected.

Table 6: Fairtrade products sales

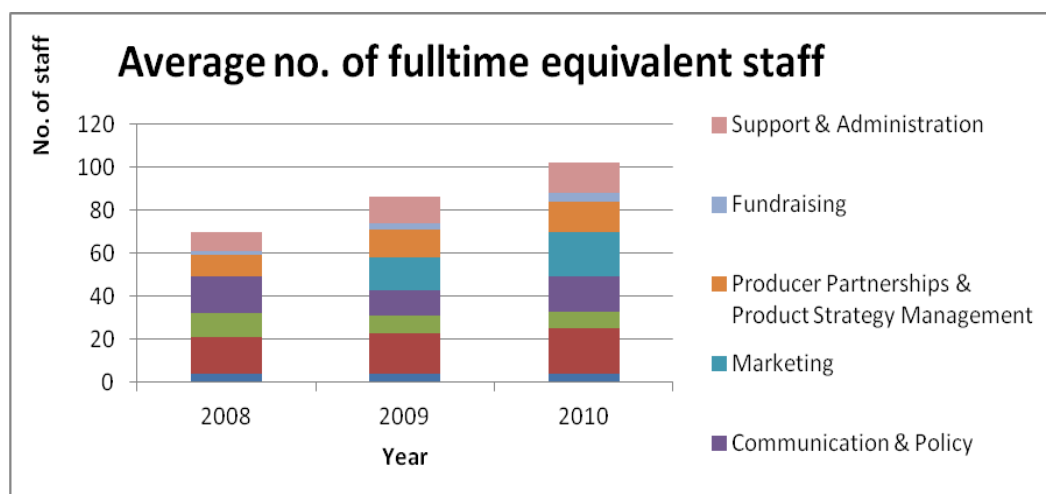
Product Names	2007 Sale Volume (tonnes)	Annual Growth Rate (%)	2008 Sale Volume (tonnes)	Annual Growth Rate (%)	2009 Sale Volume (tonnes)
Coffee	8,388	15,2%	9,666	24%	11,982
Spices	38	29%	49	28,5%	63
Sugar	7,297	524%	45,561	52%	69,216
Cocoa	1,805	10,6%	1,997	78%	3,556

Source: Fairtrade Foundation (2011)

Facing stiff competition in the market, the Fairtrade Foundation constantly re-assesses its rules to deal with problems (FAIRTRADE FOUNDATION 2012b). It cooperates with an increasing number of producers in the mainstream market to present its meaning and value. Some mainstream companies are involved as commercial partners. Both sides have a common interest in sustainability. They can use each other's skills to serve their own interests (OXFORD POLICY MANAGEMENT 2000: 32). Meanwhile, it is crucial to explore new products. In 2010, almost 25% of the licences were released for new varieties in the Fairtrade market (FAIRTRADE FOUNDATION 2012b: 15). The product range of Fairtrade today encompasses beverages, food, textiles and cosmetics. To ensure stable improvement, the segments marketing, product support and customer service have become increasingly important. Fairtrade has thus strengthened its human resources and financial investments. The number of full-time-equivalent staff in the departments of marketing and commercial relations and product development increased significantly; while the staff in other departments is relatively stable (Figure 13). In 2008, nobody was fully responsible for marketing. Only two years later, the marketing department had 21 employees, which is about 21% of the total staff in the Fairtrade Foundation. Although relevant costs increased, investments seemed worthwhile and the achievement was remarkable. In 2010, total income was 10.9 million UK pounds – an increase of 24% compared with 2009 (FAIRTRADE FOUNDATION 2012a: 28). Licence fees contributed 77%, while grants brought 20% funding. The Fairtrade Foundation also received 250,000 pounds in donations, including 170,000 pounds through consultancy work. Although Oxfam, Christian Aid, Tearfund and the Catholic Agency For Overseas Development (CAFOD) gradually stopped their financial support for grants, total income from grants still increased by 22% in 2010 (FAIRTRADE FOUNDATION 2012b: 25). Fairtrade hopes that the governmental and institutional support can be continually strengthened, since it focuses on the needs of marginalized smallholders who are too poor and weak to improve their livelihoods

(FAIRTRADE FOUNDATION 2009: 5). To further raise the awareness and understanding of Fairtrade concepts, the foundation cooperates with the European Union in the ‘Fairtrade Town in Europe Project’. Any community can apply to become a Fairtrade Town when it meets certain targets, which vary from country to country. Many marginalized smallholders can benefit directly from the project, since the Fairtrade sales in these towns are normally enhanced (FAIRTRADE TOWNS ORGANISATION 2012).

Figure 13: Average number of fulltime equivalent staff



Source: Fairtrade Foundation 2011 (Annual Report 2009/2010) 2012 (Annual Report 2010/2011)

4.2.2 Fairtrade certification

Fairtrade certification is an assessment process, and application and registration are voluntary. Its objective is specific products, mainly agricultural products. If the production, including products and related quality management, can meet the standards and supplementary requirements, a Fairtrade certificate and logo can be issued. This Fairtrade logo can be used on certified products and their packaging. It can also be applied in relevant marketing and related communication material (LUO, B. 2004: 14). The Fairtrade standards are regulated by FLO e.V., which is responsible for assisting producers in gaining and maintaining certification. The standards are classified in three levels, general, minimum and progress requirements. From a macro-perspective, the general standard is focused on scale, target, mechanism, registration, performance and inspection. While minimum requirements have to be met before initial certification, the compliance for progress requirements can be gradually achieved with the continuous efforts of Fairtrade members. The criteria of certain progress

requirements can be adjusted according to the actual situation of the farmer's organisation and participation level in Fairtrade certification in terms of financial and other profits.

Although the registration of Fairtrade certification is open for two different group categories, namely small farmers and hired labour, the small farmers' group is considered as the central target of FLO and main force of Fairtrade certification in relevant literature (FAIRTRADE FOUNDATION 2009: 2; FAIRTRADE FOUNDATION 2011: 3). Therefore this research is focused on small farmer's standards. In the Fairtrade requirements, the concept of small farmers can be described from four aspects:

- The labour of farmers and their family members occupies a significant share in the total labour amount of farming.
- Farmers take most of their working time for their own farm.
- Farmers' income depends mainly on agriculture.
- To satisfy buyers' requirements and facilitate the marketing of products, necessary resources, property and infrastructure can be collectively managed for the cultivation activities.

Besides the market concern of commercial partners, development is a major purpose of Fairtrade. Due to the comprehensiveness of Fairtrade requirements, the certification process is not limited to the paper work. It takes three years to finish the whole certification process. This starts with the application proposal about the social and economic development of the local Fairtrade association with the consideration of environmental protection. It can be a general draft in the first year. With the assistance of inspectors, a specific performance plan needs to be submitted to demonstrate the importance and necessity for local sustainable development in the next two years. A Fairtrade premium is included in the final sale price, which is used to support related social welfare projects in the local community. To ensure the democratic management of the association, a general assembly and board have to be organised. While the final decision needs to be made and confirmed in the general assembly, the daily management is undertaken by the elected board. The general assembly should be held at least once a year for the inspection of annual reports, budgets and development proposals. Members can be represented by delegates or can vote directly on the final decision in the meeting. With the consideration of economic benefits, the association is expected to assist members in achieving an environmentally friendly agricultural practice and minimizing the possible chemical damage. The utilization of on-farm compost and biological disease control are encouraged, since a sustainable

development has to be considered from the aspect of environmental protection. Synthetic fertilizers and pesticides can still be cautiously used in the whole farming process. However, genetically modified organisms are forbidden in Fairtrade agriculture (FLO 2009).

Due to the comprehensiveness of Fairtrade standards and the consideration of economic efficiency, it is almost impossible for a single farmer to apply for Fairtrade certification. FLO-CERT GmbH normally deals with local farmers' organisations with at least 50% small farmers. The average number of members is about 1634 with a high variation (FAIRTRADE FOUNDATION 2011: 3). Trading in the Fairtrade system is not obligatory. Each Fairtrade commercial partner makes his own decisions and buys appropriate products taking market and company situation into consideration. FLO-CERT coordinates the procedure and ensures the achievement of minimum contract prices in the Fairtrade business. Price is a significant characteristic of Fairtrade. It is a free on board, and a basic price which is a balance between production expenses and price competence in the market competition. It is drawn up in a six-step decision-making process that starts with the producers (Table 7).

Table 7: The decision-making process of Fair trade minimum price

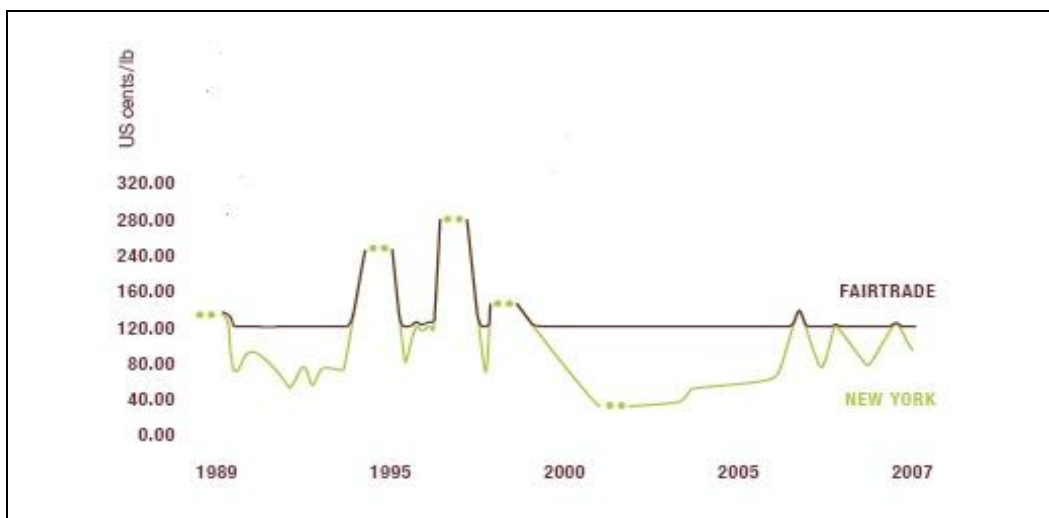
Step	Process	Details
1	Pricing Project Request	FLO provides farming cost form to local Fairtrade cooperatives.
2	Project Planning	The cooperatives present their farming expenses to FLO.
3	Research	FLO synthesizes and presents the first price offer.
4	Consultation	FLO coordinates and discusses the first offer with farmers' cooperatives and traders/national initiatives. A second price offer can be achieved to present the compromise of all stakeholders.
5	Approval	The second offer is submitted to the standard committee, which is the final decision-making organ.
6	Implementation	The final price decision is effective for all stakeholders, namely farmers' cooperative, traders and national initiatives.

Source: Author (2011)

To better understand the minimum contract price, coffee, a typical and traditional Fairtrade product, is chosen to explain the situation. Since the international coffee price constantly fluctuates and is difficult to predict, some international organisations, such as International Coffee Organisation (ICO), participate in the consultation on a minimum price that is fair compensation with respect to the farming costs. The minimum price is

usually higher than the New York Price established by the conventional market. In the meantime, it follows the price trend in the conventional market and rises and falls with the price in New York. However, it will stay stable when the international price falls to a damaging level. While it remains below the minimum contract price, producers serving the fair trade market continue to receive the minimum price. It represents a formal protection system to avoid heavy losses for the farmers. It protects small farmers' income in periods of low market prices and provides a "safe value" for guiding farmers' investment decisions. It is a strategy for poverty alleviation. Moreover, FLO releases regular supplementary specifications to adjust the minimum price according to variety, post-harvest process and geographic location for coffee and other popular Fairtrade products (Table 8).

Figure 14: Fairtrade coffee price development



Source: FLO-CERT (2012)

The price strategy has shown its ability to contribute to the development in the developing countries. Compared with the farmers in the traditional mainstream market, Fairtrade participants received significantly higher financial profits in 2010, in the order of US\$ 30 million. The successful story of coffee typically presents the three important purposes of the FLO fixed pricing structure activities, i.e. administrative efficiency, predictability in pricing and coverage of variable costs of production for producers.

Table 8: Price list of coffee

	Fairtrade Minimum Price (for conventional coffee)	Organic Differential	Fairtrade Premium	Validity
Type of coffee	All regions	All regions	All regions	All regions
Washed Arabica	1.25	0.20	0.10	Since: 1 June 2008
Non-washed Arabica	1.20	0.20	0.10	Since: 1 June 2008
Washed Robusta	1.05	0.20	0.10	Since: 1 June 2008
Non-washed Robusta	1.01	0.20	0.10	Since: 1 June 2008

Source: FLO (2009)

4.3 Institutional certification system and market in China

In China, the concept of certification comes from the recognition of product “safety” (STATE COUNCIL CHINA 2003). Since 2006, Quality Safe (QS) has become a part of the management system and was compulsorily introduced by the General Administration of Quality Supervision with the institutional support on ‘Food Quality and Security Supervision Rules’. Without the QS logo on a package, no food and beverage is allowed to be sold in the market (GENERAL ADMINISTRATION OF QUALITY SUPERVISION 2003). However, QS mainly refers to ‘safety’ and product ‘quantity’ and ‘quality’. In relevant administrative laws and regulations, safety is the primary standard, related to cleanliness, harmlessness and health. Complementary requirements are concerned with affordable and available quantity, nutritional quality and package standardization (STATE COUNCIL CHINA 2006). Such awareness influences the establishment and development of the certification system in China.

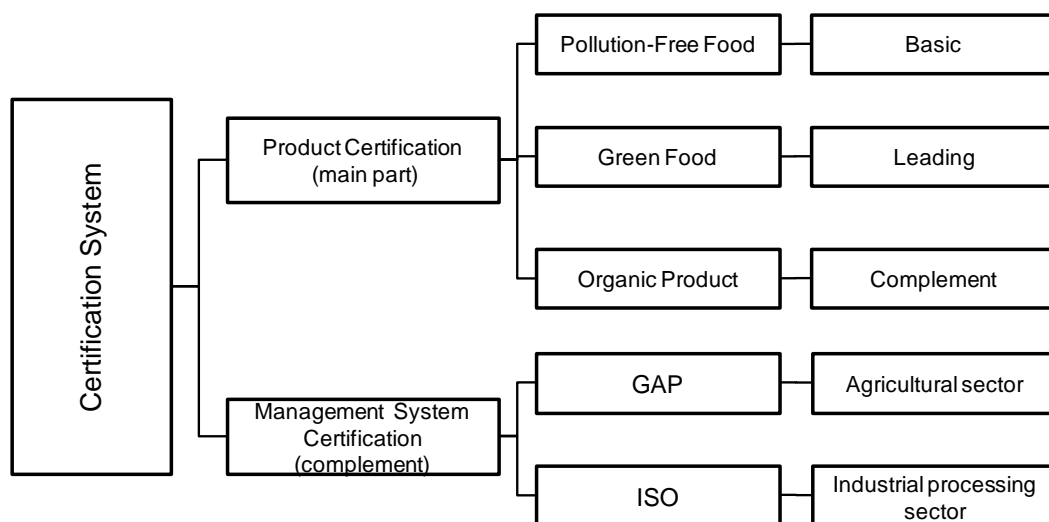
4.3.1 Development of certification and relevant certificates

In the 1980s, the certification system was gradually introduced in China. Product certification was experimentally practiced in the food and beverage industry. Based on the ISO 9000-1987 series, the National Standardization Governance Department released the GB/T 10300 standards for quality control systems. The China Quality Association and other institutions with government backing had the authority to inspect the quality control system in enterprises (SUN, D. 2005: 42). In the 1990s, the certificate system was

introduced nationally with juridical recognition. Since 1991, the State Council has introduced a series of laws, regulations and technical standards for certification. Various administrative departments were established to perform product certification of green and organic food products. A great achievement has been made in the field of certification management. In 2001, the Certification and Accreditation Administration of P.R. China (CNCA) was set up to regulate and research all projects and processes related to the inspection of producers, trade auditing and certification. With the assistance of CNCA, the certification administrative structure and the relevant juristic institution have been unified and strengthened (CNCA 2010: 30). The regulation framework includes laws, administration regulations, department rules, administrative documentation and technical standards. Although several laws have mentioned the activities of certification, no specific law has been implemented. The central paper for certification is the Regulations of the People's Republic of China on Certification and Accreditation released by the State Council in 2003. Since there are many varieties of relevant rules, documentation and technical standards issued by local and central governments, it is hard to completely avoid confusion and contradiction between certain rules and regulations. The latest versions are usually issued to clarify any confusion.

With the support of legal institutions, a food safety certification system is gradually being established. It is voluntary and related to product and management systems. Product certification covers pollution-free food, organic products, food quality (wine) and green food certification. ISO 22000 and Good Agricultural Practice (GAP) represent management system certification (Figure 15).

Figure 15: Certification system in China



Source: Author (2011)

Pollution-Free Food Certification

It refers to the edible agricultural products that pass relevant national standards and rules in terms of geographic environment, production process and product quality (AGRICULTURAL MINISTRY 2002). Non-pollution is the lowest and most basic requirement for food quality. Pesticide residues and heavy metal content have to comply with national standards and not impair human health. It is a certification designed by CNCA. Authorized certification initiatives can certify products based on the standards and related procedures released by CNCA. Qualified companies or farms can obtain certificates and be allowed to use its logo for packaging in China (LEI 2004: 2). Pilot certification projects were performed in certain regions in 2000. Since 2003, certification has been officially promoted with the support of the Agricultural Ministry. Provincial agricultural administration departments provide the confirmation of origin. Based on it, the local agricultural safety product centres, authorized by the Ministry of Agriculture, can start the certification process (WU, P. and ZHAO 2010: 174). Today, there are over 535 agricultural categories, including 344 from the cultivation sector, 62 from animal husbandry and 129 from fishery. The certificate has been issued for 16,060 registered products (CNCA 2010: 86). However, coffee in Yunnan is not in the registration list. With the consideration of buyer demand and relevant cost, the certification does not attract a lot of attention in the Yunnan coffee industry (YUNNAN COFFEE GUILD 2012).

Organic Product Certification

The cultivation, processing and distribution processes of organic products for certification are in compliance with national organic standards. The related products can be provided for human consumption and animal stock breeding. The certification procedure assesses activities of certification initiatives in the sectors of cultivation and processing (GENERAL ADMINISTRATION OF QUALITY SUPERVISION 2004). The coverage of organic products is wide, mainly concentrated on food and beverages. According to national organic standards (GB/T 19630), the use of pesticides, fertilizers, growth regulation solvents or additives and other chemical component materials is forbidden in the entire production process. At the end of 2006, there were more than 20 authorized initiatives and over 1600 labelling companies (CNCA 2010: 86). Three of them are major institutions with strong governmental background, namely the Organic Food Development and Certification Centre of China (OFDC), the China Organic Food Certification Centre (COFCC) and the Organic Tea Research and

Development Centre (OTRDC). OFDC has also obtained the accreditations of the International Federation of Organic Agriculture Movements (IFOAM) and ISO65. Furthermore, it cooperates with OCIA in America, JONA in Japan and OCIA-JAPAN, and inspects their registered products in China (NANJING ORGANIC PRODUCTS CERTIFICATION CENTRE 2012). Its certificate is widely accepted in many countries. In general, organic certification can be considered as an outcome of the demand and supply relationship and shows the market tendency. It is growing rapidly and becoming increasingly recognised internationally. There is also organic certified coffee in Yunnan, China. Several coffee brands with organic certification are accepted by the consumers (YUNNAN COFFEE GUILD 2012). To increase relevant influence, the organic feature in coffee is often integrated with other characteristics, such as high-land and ethnic exotica.

Food Quality Certification (wine)

Only alcoholic beverages can be certified. The certificate focuses on produce safety / quality level and the guarantee of production capability in enterprises. Relevant companies comply with the requirements from international certifications, such as HACCP and GMP, as well as the national standards. The Chinese Wine Quality Certification Centre is the only responsible initiative permitted by CNCA. By the end of 2005, there were 115 certified products from 29 companies (CNCA 2010: 87). Since it is a specific certification for alcoholic beverages, it has no effect on the Yunnan coffee industry.

Green Food Certification

Green food refers to safe, good quality and nutritious products complying with sustainable principles, produced in specific modes and certified by relevant initiatives (JIANG and CHEN 2004: 8). It consists of five sub-standards, namely geographic origin, production technique, product safety, packaging/storage and transportation requirements. Its marketing position and quality level is between pollution-free and organic certification. It has two rating levels: Level A represents good and Level AA means better. The China Green Food Development Centre (CGFDC) and its 38 affiliates are in charge of the certification. With the support of the Agriculture Ministry, by the end of 2006 there were 4,615 certified companies with 12,868 related products. The certificate is similar to the pollution-free certificate in the Yunnan coffee industry. It does not attract much attention and has limited influence (YUNNAN COFFEE GUILD 2012).

ISO 22000 Certification

Originally it comes from the systematic preventive approach under Hazard Analysis and Critical Control Point (HACCP). To co-ordinate the relationship between HACCP and ISO 9000, the ISO food technique committee (TC 34) drafted the certification rules of ISO 22000 standards in 2000 and released them in September 2005. Now China is in a transition phase, moving forward. By the end of 2006, 1,745 ISO 22000 certificates had been issued (CNCA 2010: 92). The certification is applied in the coffee industry in Yunnan, especially for the companies focused on the coffee export business (YUNNAN COFFEE GUILD 2012). It generally stays at the enterprise level. Most coffee farmers do not have the relevant understanding of the certification.

Good Agricultural Practice (GAP) Certification

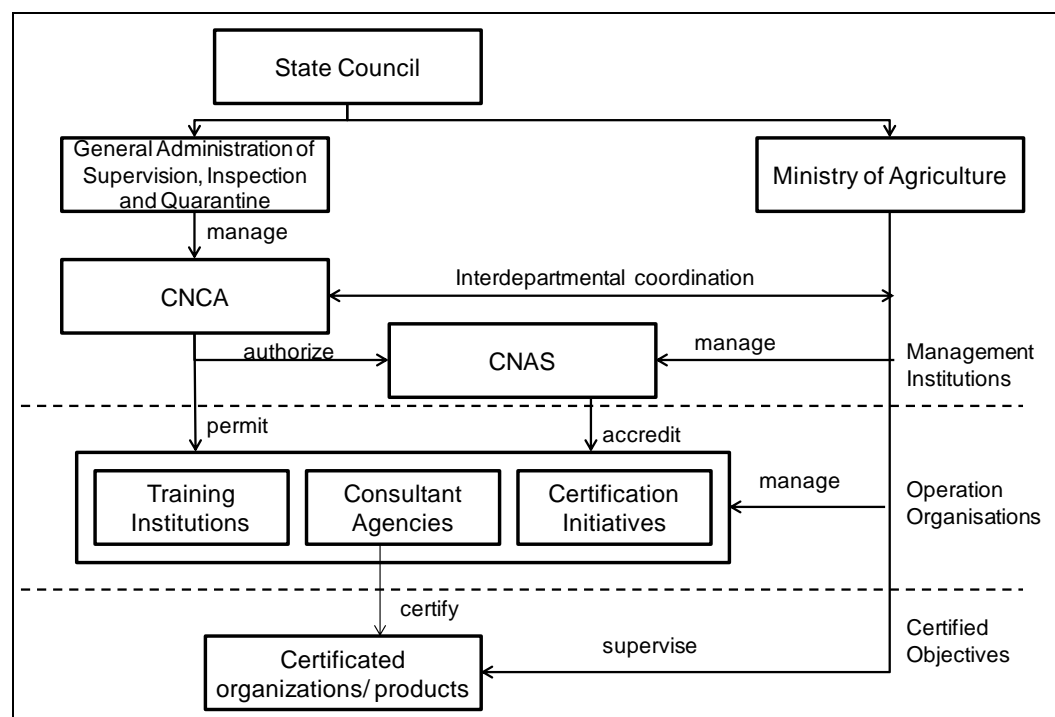
GAP has four concepts, namely economical and efficient production to ensure food security, food safety and nutritious food, maintaining agricultural development to contribute to a sustainable livelihood and enhancing natural resources to meet cultural and social satisfaction. With the consideration of sustainable development and agricultural safety, it is focused on the farming and post-harvest process of different agricultural products. Since 2004, CNCA has started to standardize national GAP standards. In 2005, CNCA and EurepGAP/FOODPLUS signed memorandums for standard technique cooperation. Later, China GAP National Standards (GB/T 20014) were released based on EurepGAP relevant requirements (CNCA 2006). Since 2006, CNCA has promoted ChinaGAP in 14 regions. To date, 41 certificates have been issued in China. In Yunnan some coffee companies know of the certification, but tend not to apply if relevant traders do not have specific requirements (YUNNAN COFFEE GUILD 2012b).

4.3.2 Administration structure and supervision system

With the rapid development of the certification movement, its administrative structure is constantly being improved. A three-level system is gradually being established, which consists of administration departments, operational organisations and registration objectives (Figure 16). CNCA and the Ministry of Agriculture are responsible for routine management work. CNCA was officially established in 2001, authorized by the State Council. Its administrative higher body is the General Administration of Supervision, Inspection and Quarantine. CNCA generally manages,

inspects and co-ordinates the tasks of certification and accreditation, while its subordinate department, the China National Accreditation Service for Conformity Assessment (CNAS), is specifically in charge of the accreditation for certification initiatives, laboratories and monitoring institutes. It evaluates their management system and technical capacity. The Ministry of Agriculture is the competent authority for agriculture and related products. According to the third clause of the Agricultural Product Quality and Security Law, the regional agricultural administration department is in charge of the supervision and management of local agricultural products. At the level of operational organisations, the certification initiative is the core sector to inspect applicants and issue certificates. Training and consultant agencies are responsible for the facilitation and promotion of certification activities. Based on the rules of the Certification and Accreditation Regulation, all relevant organisations have to obtain the administrative permission of CNCA. Without this permission, they are not able to apply for registration at the industrial and commercial department. The financial, technical and physical conditions for certification initiatives are listed in the regulation to clarify the correspondent qualifications. An initiative needs to invest a minimum of 360,000 Euro for the registered capital in a permanent office and basic facilities. At least 10 professional experts and inspectors work in the organisation. To perform related detection and analysis activities, laboratory and technical competence can be necessary. CNCA has the responsibility and obligation to manage and inspect all relevant laboratories and organisations, including certification initiatives, consultant agencies and training institutions.

Figure 16: Administration structure of the certification market

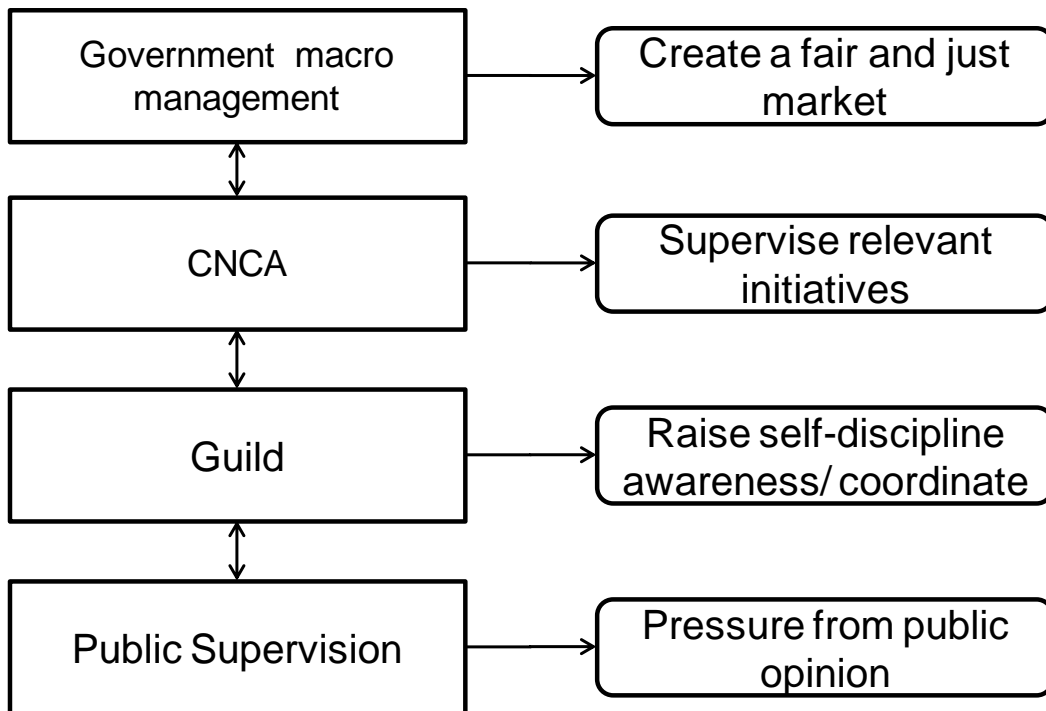


Source: Author (2011)

With the support of public and juristic guidance, the governmental authorities and certification initiatives constructed a supervision mechanism. From the perspective of social governance, the management and inspection of the certification market is comprehensively divided into four dimensions, namely institutional support, administration management, self-discipline awareness and media/public opinion (Figure 17). The central part is an administrative inspection that is managed by CNCA, carried out by local certification departments and interdepartmental conferences and supported by 22 related ministries and bureaus. The supervision parties are certification initiatives, consultant agencies, training institutions, certificated companies and relevant persons. They have to accept random spot checks and submit activities reports. Any illegal certification organisations are banned once they are found. The supervision also can be performed from the accreditation perspective. Related organisations have to constantly improve themselves, strengthen management and achieve guidance requirements to pass the accreditation evaluation. Furthermore, they build up their own supervision guild to reinforce communication, coordination and coherence. The guild collects information, conducts assessments, raises self-discipline awareness, and facilitates the supervision of the local government (WAN 2006). Finally, public supervision plays a crucial role. In recent years, CNCA received and handled over 400

complaint letters and calls. Many complaints were reported by media outlets and caused a considerable reaction and feedback in society.

Figure 17: Framework of management and supervision for the certification market



Source: Author (2011)

4.4 Challenges in the Chinese certification market

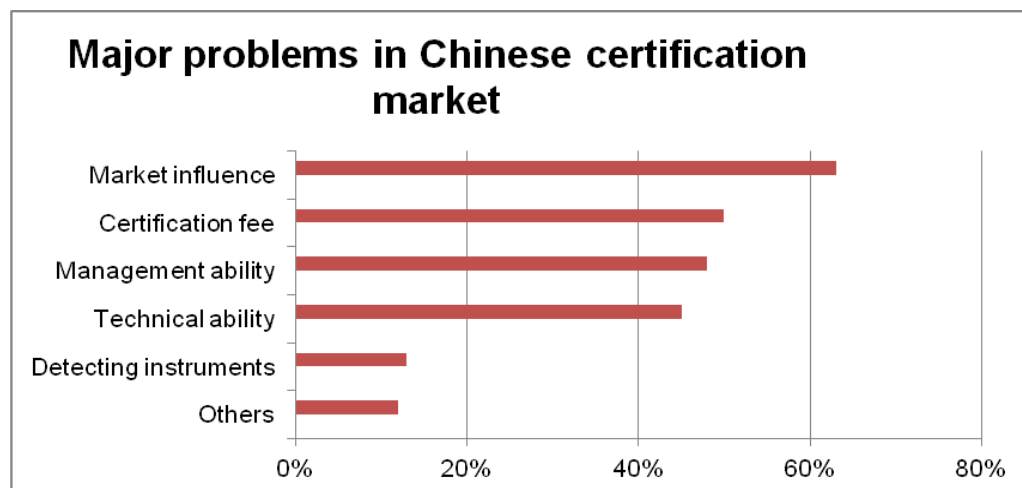
Certain challenges are hard to avoid in a period of rapid growth. The difficulties in the Chinese certification market occur in the context of local society. The institutional arrangement and performance capacity can hardly keep up with the speed of change and its diversity development. The credibility of certification is damaged in the public opinion. Related influences affect not only the market circumstances but also different certification initiatives and products. Due to its own certification concept and focus, FLO faces its specific challenges, especially in terms of Fairtrade cooperatives. Farmers' cooperatives play a crucial role in the Fairtrade certification. An improper construction of the cooperative might lead to many management difficulties, and these can be found in many countries. A study of Fairtrade cooperatives and related resources support might be beneficial for FLO activities in China and contribute constructive ideas for the establishment and management of the cooperatives.

4.4.1 Problems and their causes in the market

With the development boom of the certification movement in China, some problems have gradually emerged. The credibility of certification is directly affected and becomes the main obstacle for healthy growth in the Chinese certification market. In the last few years, many scandals have been exposed. The most famous one is the contaminated milk powder of SanLu Company in June 2008. Thousands of babies were affected and suffered from kidney stones. However, just before the scandal the company had obtained the organic certificate in April 2008. It also had ISO9001, ISO14001, GMP, HACCP certificates. Its milk powder even qualified for the National Exemption Product (*Xinhua News Agency* 2009).

Due to a series of scandals, public confidence has been largely lost (WANG, Y. 2006). In 2009, CNCA carried out a survey on national certification initiatives. Only 39% believed the level of credibility was fair, while 4% considered it was relatively low. The survey also reflected the biggest problems for the certification market (Figure 18). In different meetings and forums of CNCA, relevant solutions are discussed and announced (*Workers' Daily* 2012). A certification and accreditation law is also proposed to increase supervision and standardization of the certification market (ZHOU, Y. 2006: 1).

Figure 18: Major problems in the Chinese certification market



Source: CNCA (2010)

The low level of credibility is not a contingent event. It has been caused by many factors over a long period. The reasons can be generally analysed from two aspects, namely institutional design and operational mechanism

(FAN, H. 2007a: 39-41; CHEN, A. and YANG, Y. 2007: 54-55). They are listed in the following:

Institutional Design

- Relevant laws, regulations and rules are not complete. Among them Certification and Accreditation Regulations is the most authoritative documentation, which standardizes the qualification of certification initiatives and their certification process (STATE COUNCIL 2003). It is too general, filled with loopholes and not systematic enough to follow. For instance, the legal responsibility for certification initiatives is principally regulated. There are no specific applicable condition and classification details. To some extent, it is weak in the related accountability system (FAN, H. 2007b: 63-65).
- The governmental supervision institution is not coherent. Efficient supervision is an important protection for a healthy certification market (LI and CHOU, 2006: 40). CNCA theoretically takes charge of certification in China. However, its authority and capacity are limited, since its purview of authority is partially overlapped with the Ministry of Health, Ministry of Agriculture, local administration bureaus, etc. The coordination and communication among various governmental departments needs to be improved. Furthermore, there are few information exchange channels or platforms between supervision institutions and civil organisations, such as guilds, certification initiatives and media body. Relevant problems cannot be promptly reported and solved. Supervision efficiency and public trust are reduced.
- The certification initiatives are not independent parties. Theoretically, they should be free from interests, controls and affiliates of any government department according to Certification and Accreditation Regulations and Product Quality Law (XIONG, X. 2007b: 26). But the reality is that most certification initiatives have close ties with their supervision bodies. This greatly damages the efficiency and fairness of supervision.

Case 1: China International E-Business Centre

In 2010, the China International E-Business Centre, authorized by the Ministry of Commerce, issued national E-Business certification rules and released 29 certificates. Each certified website had to pay approximate 5,000 Euro in certification fees. Later, Mr. Wang (lawyer) suspected irregularities in the accreditation process and informed CNCA. There has still been no official response from the relevant authorities.

Source: Li, B., Beijing Times; 25th November 2010
(Available at http://epaper.jinghua.cn/html/2010-11/25/content_606319.htm)

Operational mechanisms

- The inspection process is often inefficient. Due to the common interests of certification initiatives and the overlapping duties of various administrative authorities, responsible departments have less inspection willingness. Although the interdepartmental meeting, which involves 22 related ministries and bureaus, can theoretically facilitate coordination and communication, united operation is difficult to organise and has only a limited function at the local level. For example, Rainforest Alliance Certification cannot obtain accreditation and is forbidden by CNCA in China. Due to the cooperation with local coffee enterprises and the government, it can however start its certification and recruitment activities in Yunnan. Its coffee plantations already cover over 660 ha (*Kunming Daily* 2012). The shortage of funding, technical capacity and human resources reduce the efficiency of inspection. The situation is marked in rural regions and hinders on-site control.
- Some certification initiatives are not qualified and cause a vicious circle. According to the Certification and Accreditation Regulation, initiatives must have fixed office space, basic assessment instruments, professional inspectors and at least 34,000 Euro registered capital. Establishment has to be permitted by CNCA. As the certification market is highly profitable, many of them take the risk and start business with the support of different administration institutions, even though they do not achieve minimum requirements. This causes chaos in the market and mistrust in the public. Cut-throat competition and regional monopolization can also be found in some areas, which damage the credibility of certification.
- Certain companies show illegal behaviour. They consider certification as a pure marketing means. For a high sales profit, they cooperate with illegal certification initiatives. Some overvalue their certificates or create sham publicity. Some fake documents and bribe when they apply for

official certificates. The loopholes of supervision institutions are used. Consumers are confused and cheated.

- Media institutions could contribute to better supervision. However, they do not seriously check relevant advertisements and propaganda. Some know about the illegal activities but participate for financial benefit. Some scandals cannot be properly reported on for various reasons.

Case 2: National Teeth Protection Group

In 2008, the establishment of the National Teeth Protection Group (NTBG) was approved by the Ministry of Health. Since 2002, it has enlarged its certification coverage to all stomatologic products and received over 2.5 million Euro in donations. In 2005, its accreditation identity was suspected. Mr. Chen (lawyer) and Mr. Li (juristic doctor) sued NTBG and gained great public attention. In August 2006, the court issued a justice advice to CNCA and the Ministry of Health. It suggested they conduct an investigation on NTBG and enforce an appropriate punishment. In November 2006, the certification activities of NTBG were suspended, with the unanimous agreement of both governmental authorities.

Source: JIA, D. AND GE, W. (2007)

The chaos in the certification market affects all certificates and relevant certification initiatives. Due to the credibility problem, the potential of the domestic market is compromised for Chinese Fairtrade products. For Yunnan coffee, Fairtrade transformation has become more difficult. Furthermore, the performance and development of FLO in China is influenced negatively.

4.4.2 FLO activities and products in China

The fair trade movement is still in its early stages in China. Since 2011, FLO has cooperated with Co-ops Integrity Certification Centre, the only Fairtrade certification initiative in China (CO-OPS INTEGRITY CERTIFICATION CENTRE 2011). The centre, as a certification company, has a strong relationship with the All China Federation of Supply and Marketing Cooperatives, especially its subordinate agricultural research institutes (NANJING FRUIT RESEARCH INSTITUTE 2012). The institutes provide stable technical support for relevant certifications. Although Fairtrade promotion has just started, there are four certified tea companies in China (FAIR NETWORK OF ASIAN PRODUCERS 2012). They have FLO

commercial partners in the developed countries. The Dazhangshan Organic Tea Association has the longest history, and is chosen as an example in the case study. Although various agricultural products have different technical requirements for production, transportation and trade details, they are the same from the perspective of the certification process. For the Fairtrade coffee farmers' cooperative in Yunnan, the case of the tea association can provide valuable experience, since it has similar challenges in the fields of certification management, cost control and economic efficiency.

Case Study: Dazhangshan Tea

As a social professional group, the Dazhangshan Organic Tea Farmer Association was established in October 2000, comprising Dazhangshan organic tea growers, producers, processors, managerial entities and individuals, with 27 branches and more than 4,500 households. The association was registered by the FLO in 2003. Its main body is Dazhangshan Organic Food Co., Ltd., a joint-equity enterprise with its own export license. The company is a successful export enterprise and has a large green tea market share in Europe and Africa. It has become one of the top ten enterprises in the Jiangxi Food Industry and was recognized as a "National horticultural product export model enterprise" by the State Agricultural Department and State Ministry of Foreign Trade and Economic Cooperation. It was the Leading Company in the Agricultural Industrial Management and Enterprise hundred in the Chinese food industry. These companies have various certificates, such as BCS Öko-Garantie, IFOAM, USDA, Geographic Origin and Fairtrade certificates.

The collaboration with FLO started with a German customer, which is also a FLO commercial partner and buys certificated organic tea in China. The German company wanted to enter the Fairtrade market and suggested organising a farmers' association for the registration of FLO. To satisfy this customer's wish and increase sales, the association was rapidly established, as a NGO. The chairman is the boss of the company. A vice-chairman is the vice-director of the local tea administration bureau. Over 80% of the management group are employees in Dazhangshan companies. The other positions are staffed with tea farmers.

FLO inspector: *Comes every year and focuses on relevant standards. The most important part is the utilization of the Fairtrade premium. The premium is approximately 30,000 Euro a year. An educational foundation has been established to support the farmers' children. A scholarship is offered for the kids at high school and university. Not much money is involved, but it can more or less cover basic expenses. A school and a*

dormitory were set up with funding from the premium. The rest was used for production projects, such as garlic and ginger plantations. Labour standards are also enforced. The premium is remitted when the inspection is passed.

Company: Fairtrade is a business model. Consumer satisfaction is important, although related costs are increased. For example, the fire protection system is arranged to improve safety and meet relevant standards. However, some requirements are difficult to achieve completely, depending on the local situation. The general assembly is an issue. Based on Fairtrade standards, all farmers need to attend the general assembly and express their opinions. However, there are 4,500 households with about 20,000 persons. There is no place where such a large meeting could be held. The logistics for food, drink, medicine and safety are also difficult to organize. A final decision is hard to make, when 20,000 opinions are submitted in the meeting at the same time. A compromise is needed.

Farmers: The sale contract is signed at the beginning of the year. Although the price is not high, the sale is guaranteed. With this stability, farmers can set up a long-term plan. The biggest discussion is about the relationship between company and farmers' association. The company actually controls the association. According to Fairtrade standards, the independence of the association is important. However, the association cannot be established without the company's support in terms of financial and human capital. The maintenance of certification is expensive. A professional manager has to prepare relevant papers annually and documents every 3 or 4 months. FLO needs a third-party translator in the inspection process. When the inspector comes, the company has to hire a third-party translator from the city, costing 40 Euro per day. A farmers' association cannot handle all the details alone. The company believes both sides have common interests, since farmers have a long-term cooperation. Moreover the farmers' association is a NGO. Based on relevant regulations, it cannot be registered as a civil organisation without the responsible administrative institution. The local tea administration bureau is the responsible authority for the tea farmers' association. Communication is important for delivering good supervision. Therefore, it is reasonable that the vice-director of the bureau also becomes a vice-chairman of the association.

Source:

Dazhangshan Organic Food, 2012; Dazhangshan Organic Tea Farmer Association, 2012 and Wu C., 2008

4.4.3 Fairtrade cooperative and related resources

The situation in China is specific for Fairtrade certification. In the context of local institutions and society, it has its concrete conditions, such as the strong support of the agricultural research institutes. Besides its academic activities, the institute works as an active promoter and presents its commercial vitality in the performance process of Fairtrade certification. It is a unique phenomenon in China and shows its development potential. On the other hand, many challenges in Chinese cooperatives are not new issues for the Fairtrade movement. They can be found and compared in other countries and Fairtrade cooperatives (MURRAY *et al.* 2003: 14-26; RONCHI 2002: 23-24).

External assistance in Fairtrade is a typical example. It is common for local Fairtrade initiatives and related cooperatives to receive external aid that is often provided and managed by governmental entities and international development agencies (UTTING-CHAMORRO 2005: 592). While fair trade activities in Latin America greatly benefited from the neoliberal movement (BACON 2005: 500), fair trade coffee in Tanzania is dependent upon the efforts of the African socialist approach of Nyerere (PIROTTE 2006: 444). The cooperatives in Thailand are also influenced by the workings of the military system (interview with Dr. Ruediger, 2009). Most support is presented in the form of policy facilitation, financial capital and related services (MURRAY *et al.* 2006: 187). Besides the governmental support, development agencies prefer to provide assistance with a 'bottom-up' strategy. Relevant funding, productive material, technical backup and training services are offered and distributed at the local level. The rural community is often the focus of such operations.

However, simple aid cannot efficiently raise the independent spirit of Fairtrade cooperatives, and causes anxiety about the validity period of concrete policies or program (RAYNOLDS *et al.* 2004: 1116; PIROTTE *et al.* 2006: 445). To further improve the effectiveness of external assistance, it is necessary to emphasize the know-how capacity in the cooperatives to solve the challenges caused by technical demand (WOLLNI and ZELLER 2006: 6). **Technical demand** is presented not only in the agricultural practices but also in the understanding about the concept of Fairtrade. Although the importance of capacity building is well recognized, the effect is often limited by different factors, such as traditional culture, product requirements and operational approach. In the meantime, the demand for quality improvement constantly increases. Product quality is explained in different dimensions, such as trader expectation, food safety, ecological

trend and the realization of moral value. The requirements for technical competence are constantly enhanced. The reinforcement of human resource input, embodied in the form of educational input, training chance and publicity activity, becomes very crucial. It can let farmers not only fulfil the requirements of quality improvement and agricultural skill but also promote the right understanding about Fairtrade. For example, in BACON's empirical research, the positive correlation between training and participation in the speciality markets, including sales in the fair trade and organic segments, was proved (2005: 507).

The emphasis of knowledge enhancement challenges the **economic condition** of the farmers' cooperative. Relevant training activities can strengthen cooperative management. For instance, the members of CECOCAFEN cooperative in Nicaragua know how to correctly use the Fairtrade premium if they have participated in the educational courses (UTTING-CHAMORRO 2005: 594). The risk of a direct redistribution of the premium among producers is reduced, whereas the financial burden on farmers' cooperatives is increased. Besides educational investment, the cooperatives often need to meet the costs of infrastructure construction, production facilities, debt reduction and management system. The stage payment terms also lead to difficulties in financial arrangement and related coordination, which is widely applied in many cooperatives (BACON 2005: 505). The organization provides credit for its farmers before and during the cultivation period. In the harvest season, payments are made in the trade. Farmers prefer to immediately receive the money when they hand in their products. In the end, the cooperative has to do the final adjustment to balance the difference between exported and actual prices. The risk increases with a long waiting time. If the **information flow** is slow, relevant dangers will be further increased. In Nicaragua, cooperatives and their farmers need to wait, on average, for 73 days before obtaining the full payment for their coffee (BACON 2005: 505). A rapid information flow, therefore, plays an important role in the Fairtrade business. While the reduction of multiple intermediate layers can enhance the efficiency of information flow, a broad and bridging network can facilitate the relevant transfer. The creation of this network normally benefits from constant population movement and the high diversity of group members in terms of personal background and social status (RAYNOLDS *et al.* 2004: 1116). In the meantime, the unfamiliarity resulting from a large number of members can hamper the communication, especially when they are widely distributed and divided into different subgroups. It is hard to arrange intensive interaction among farmers from different subgroups. The **heterogeneity in the**

cooperative is a serious problem, which cannot be ignored. A large number of members enhances the heterogeneous situation, while new members tend to be isolated or pushed out. The high level of mistrust is difficult to be avoided within a big cooperative (KIEMEN and BEUCHELT 2010: 15; UTTING-CHAMORRO 2005: 592; RUBEN *et al.* 2009: 785). Well developed Fairtrade cooperatives tend to constantly strengthen their social connections and optimize their internal governance (PIROTTE *et al.* 2006: 444). To emphasize group identity and cohesion, many cooperatives have established pre-conditions for members to stabilize the cooperative and assure long-term common interests (MURRAY *et al.* 2006: 185). In the empirical study of RAYNOLDS, most organizations needed at least five years to raise the necessary recognition, familiarity and coordination before they apply for certification and enter the Fairtrade business model (2004: 1115). A good social linkage can efficiently mobilise farmers achieve collective power and cooperation.

The management of social relations has to be reflected in the internal governance of the farmers' cooperative. In many countries, **governance conflict** is always a major challenge for Fairtrade cooperatives (RUBEN *et al.* 2009: 785; RAYNOLDS *et al.* 2004: 1115). The democratic characteristic introduced by Fairtrade often causes conflicts with market requirements and the original governance system of the farmers' cooperative. To maintain its competitive capacity in the market, the cooperative needs to have a rapid decision-making capacity, fulfil the price expectation of buyers, and provide a basic trade amount for the business. The democratic, transparent and participatory requirements in the decision-making process can possibly affect the efficiency of management. It is necessary to obtain a balance between democratic and market requirements. On the other hand, the cooperative rules, culture, structure and management habits might be in conflict with the concepts of Fairtrade. The general disciplines have to be optimally integrated in the original and specific management system to achieve the development in a sustainable way. Fairtrade farmers' cooperatives need strong human resource support to handle the comprehensive governance in the organization. Professional managers are widely employed to solve the challenges in business contacts, trade contracts and handling processes (LYON 2002: 17). Meanwhile, it raises the reliance on managers, which may endanger the interests and independence of cooperatives. In a young association, the problem can become significant, since the organizational mechanism is often not very mature. The weakness in the social linkage among members, group culture, collective power and

implementation capacity can allow professional managers to obtain large control benefits.

The challenges facing Fairtrade cooperatives are comprehensive and interrelated. The internal governance conflicts can possibly be caused by the shortage of human resource and economic problems. The lack of skilled staff intensifies the reliance on professional managers and the centralization of leadership, whereas the education raises the sense of democracy and increases the tension between democratic principles and market requirements (LYON 2002: 17; RAYNOLDS 2004: 1116; MURRAY 2006: 188). Additionally, the heterogeneous condition of the cooperative influences the information flow and the consolidation of the cooperative. The organizational structure and mechanisms are related with the members' social background and are crucial for external support to have an effect (OELOFSE 2010: 1792). Complicated interrelationships can easily blur the analysis of the situation and relevant solutions. The importance of the local context became particularly evident when we only focused on the superficialities. Behind the comparable appearances, it is possible to find similar essential features. In terms of Fairtrade promotion, related cooperative establishment and farmers' livelihood improvement, it is necessary to trace the origins of problems to improve the applicability and avoid similar mistakes. The vulnerability of the individual farmer is largely derived from his limited access to necessary capital (BACON 2005: 11; UTTING-CHAMORRO 2005: 587). Relevant resources are critical to successful Fairtrade engagement, while the accessibility to certification is strongly dependent on the type of resource support available to farmers (OELOFSE 2010: 1785). The surface problems in the Fairtrade cooperatives seem to originate from the shortage of certain capital or the imbalance of various resources⁸ (Table 9). From the perspective of capital access, the challenges in the cooperatives can be better identified and solved. Furthermore, the complementary effect among different capital can possibly alleviate the damage caused by the shortage of a certain resource. For example, the introduction of institutional resources, such as manager service contracts, can reduce the demand for internal human resources, while the strong social capital can convince members to increase their investment to reduce the stress of financial capital (PIROTTE 2006: 446; RUBEN 2009: 781; WILLIAMSON 1979: 248).

⁸ The resource and capital have the same meaning in the research. To avoid unnecessary confusion of definition, the fixed names of relevant concepts are respected and used, such as human resource and social capital. However all of them belong to the range of 'resource support and access', mentioned in the study.

Among different resources, the social relation is a determinant factor which can bring tremendous power and valuable influence for the solidarity of the cooperatives and the success of Fairtrade (RUBEN 2009: 785; MURRAY 2003: 14)⁹. To facilitate the establishment of Fairtrade cooperatives and the convention on certified Fairtrade agriculture in China, it is necessary and important to have a comprehensive consideration of local social relations. In the next chapter, the value of social relations and the core concept (trust) are investigated. These are crucial for the formation manner of farmers' cooperatives and related organizational structures in the context of local eco-social conditions.

Table 9: Major challenges in Fairtrade cooperatives and relevant capital

Major Issue	Reflection	Relevant Capital
External assistance	<ul style="list-style-type: none"> - Necessity of government support, such as administration grants, policy facilitation, financial support and educational opportunity (PIROTTE <i>et al.</i> 2006: 445) - Dependency on international development agencies, like monetary funding, material support, technical backup and training services (UTTING-CHAMORRO 2005: 592; RAYNOLDS <i>et al.</i> 2004: 1116) 	Institutional resource, social capital, human resource and financial capital
Governance conflict	<ul style="list-style-type: none"> - Imbalance between democratic and market requirements, such as basic trade amount, price expectation, efficient management, transparent decision-making process and high participation rate (VANDERHOFF 2003: 11; GONZALEZ 2002; RENARD 2003: 92) - Reliance on professional managers (LYON 2002: 17) - Challenges for the organizational mechanisms of young cooperatives, such as power allocation, implementation capacity, social linkage and group culture (MENDEZ 2002: 13-14) - Combination of democratic and bureaucratic forms, such as management requirements, traditional rules, group culture and governance structure (ARANDA and MORALES 2002: 3; RUBEN <i>et al.</i> 2009: 785) 	Human resource and social capital

⁹ The value and relevant influence of social relation can be interpreted from social capital that is introduced in the next chapter.

Major Issue	Reflection	Relevant Capital
Technical demand	<ul style="list-style-type: none"> - Requirements of quality improvement, such as trader expectation, food safety, ecological trend and moral value (LINTON 2007: 601; TALLONTIRE 2000: 171) - Shortage of agricultural skills, like educational input, training chance and technical support (MURRAY <i>et al.</i> 2006: 186; UTTING-CHAMORRO 2005: 596) - Right understanding about the concept and principles of Fairtrade, such as publicity approach and traditional culture (MCDOWALL <i>et al.</i> 2011: 149; TALLONTIRE 2000: 172) 	Human resource and financial capital
Slow information flow	<ul style="list-style-type: none"> - Lack of bridging network, due to shortage of population movement and diversity of group members (RAYNOLDS <i>et al.</i> 2004: 1116) - Unfamiliarity among a large number of distant farmers, amount of subgroups and interaction of members (UTTING-CHAMORRO 2005: 592; RUBEN <i>et al.</i> 2009: 785) - Redundant intermediate layer (PIROTTE <i>et al.</i> 2006: 447) 	Social capital
Economic condition	<ul style="list-style-type: none"> - Direct redistribution of premium among producers (PIROTTE <i>et al.</i> 2006: 448; UTTING-CHAMORRO 2005: 594) - Financial burden of cooperative, such as infrastructure investment, purchase of production facilities, administrative costs, debt reduction and technical assistance (RUBEN <i>et al.</i> 2009: 785; BACON 2005: 505) - Stage payment terms, like credit provision, product payment and final adjustment of price difference (BACON 2005: 505) 	Financial capital and social capital
Heterogeneity in the group	<ul style="list-style-type: none"> - Factors isolating and pushing out new members (MURRAY <i>et al.</i> 2006: 185) - Lack of trust in the group, such as the shortage of reciprocity and lack of honesty (PIROTTE <i>et al.</i> 2006: 444) - Length of time for the formation, regarding familiarity, recognition and coordination (RAYNOLDS <i>et al.</i> 2004: 1115) 	Social capital

Source: Author own illustration (2012)

5. Conceptual framework

Fairtrade is a market-based certification with equality consideration. It is gradually becoming popular and entering the main markets of different agricultural products in the developed countries. Its concept and principles are implemented in the developing countries, where it enables many farmers to improve their livelihoods, especially in the field of coffee production. It can be meaningful to study the possible collective action of Chinese farmers and the various organisational possibilities that can solve farmers' market entry barriers and increase their competitive capacity. Due to the oligopolistic coffee market in Yunnan, China, the Fairtrade cooperative of coffee farmers could provide a typical example to present the relevant constructive effects. In circumstances of domination, individual farmers have difficulty in entering the interregional market and earning reasonable incomes. Farmers need to organise themselves as a group to solve their development barriers and achieve Fairtrade certification. Meanwhile, social relationships can provide an important livelihood capital to essentially facilitate the cooperation of individuals. A performance analysis of different local groups can contribute towards strengthening the capacity and correcting the deficiency of farmers' groups. This chapter presents the deduction of the theoretical concept for the performance analysis on coffee farmers and their collective units in Yunnan, China. Section 5.1 introduces social capital and its characteristics with regard to group-oriented concerns. The important individual definitions or concepts can be selected with relevant practical implications for the case of Fairtrade in Yunnan. In section 5.2, Ostrom's (2003: 51-52) social capital modelling is presented to study the individuals' interaction in the group and relevant collective action in different situations. Her theory can provide beneficial implications to optimize the organisational structure and performance of local Fairtrade cooperatives. Finally, the performance measurement and research approach of the case study is described to present the deviation and operationalisation in the related field-work research.

5.1 A group oriented analytical approach: the debate of social capital

Social capital has a long development history. Although there is a wide spectrum of opinions about the final definition of social capital, it can be considered as a network of persons and related linkages that improves their problem-solving capacity to achieve cooperation among individuals

(OSTROM and AHN 2003: xiv; PUTNAM 2000: 446). It is a type of resource to facilitate collaboration and to obtain net profits. A comprehensive utilisation of social capital can significantly enhance the performance ability of Fairtrade farmers' cooperatives and benefit certification, while the access has to begin with the acknowledgment of social capital. In the following section, the development history is firstly introduced, followed by a description of its origin. Finally, "trust", as an important factor, is reported.

5.1.1 The history of the social capital concept

Social capital is a complex concept with a long history. From the aspect of observational scope and related objectives, it can be divided into the individual (micro-level), the organisation or community (meso-level) and the society (macro-level) (Table 10). The earliest footprint was the study of social relations in a community, which can satisfy individual social needs (HANIFAN 1916). In the study, the case of the local educational system is applied to analyse the origin of social capital and its contribution to community development. Social capital was not compared with other capitals, but discovered to explain the social aspects of life. However, as an important resource or capital, it was first classified by BOURDIEU (BOURDIEU 1986: 248) in the 1980s. It is no surprise that a dispute arose as to who actually introduced it. From the aspect of resource economics, BOURDIEU can be considered as the founder of the modern social capital concept, since this is not just a description of the features of social life, but a declaration concerning capital and related power (LANG and ALT 1996: 2). Based on his contribution, social capital gained a theoretical foundation and research direction. Recognition of the resource characteristics and related strong influence is clearly confirmed at the level of individuals and their relationships.

Table 10: Table of social capital definitions

Levels of analysis	Definition of Social Capital
Individuals and their relationships (L. HANIFAN; BOURDIEU)	<p>‘Naturally occurring social relationships among persons which promote or assist the acquisition of skills and traits valued in the marketplace. . . ’ (LOURY 1992: 100).</p> <p>‘The aggregate of the actual or potential resources which are linked to possession of a durable network of more or less institutionalized relationships of mutual acquaintance or recognition’ (BOURDIEU 1986: 248).</p> <p>‘Social capital is an instantiated informal norm that promotes co-operation between two or more individuals’ (FUKUYAMA 2001: 7).</p> <p>‘Friends, colleagues, and more general contacts through whom you receive opportunities to use your financial and human capital’ (BURT 1992: 9).</p> <p>‘The brokerage opportunities in a network’ (BURT 1997: 355).</p>
Surrounding circles (JAMES S. COLEMAN)	<p>‘Social capital is defined by its function. It is not a single entity, but a variety of different entities having two characteristics in common: They all consist of some aspect of social structure, and they facilitate certain actions of individuals who are within the structure’ (COLEMAN 1988: 98).</p>
Society (ROBERT D. PUTNAM)	<p>‘Features of social organisation such as networks, norms, and social trust that facilitate coordination and cooperation for mutual benefit’ (PUTNAM 1995: 67).</p>

Source: Author (2010)

Once social capital is recognised as a resource, it can be used to attain an advantage for a capital owner (LOURY 1992: 100). Relevant benefits can be presented in the individuals’ relationships, surrounding circles and the whole society. Although the scope and appearance might be different, the contribution of social capital is focused. At the level of the individual, the causality between capital input and profit outcome attracts a lot of attention in the field of economics. The rate of return was the emphasis of social capital research (BURT 1992: 58), while the well calculated benefit became the purpose of social capital investment in a market-oriented environment (LIN N. 2001: 19). The central theme of the thinking was an image of atomised, selfish and completely rational individuals who concentrate on short-term benefits. Therefore, such a “crudely functionalist” relationship with concerns for pure interests was criticised and challenged from an eco-social perspective (GRANOVETTER 1995: 481-482). It is necessary to mention that the economic clique generally neglects the truth that the actions of individuals are influenced, shaped and constrained by the social environment (COLEMAN 1988: 2). People tend to create a harmonious circumstance in any emergency or accident in their social life. Facing an

unpredictable future, the time limit and approach for repayment cannot be precisely calculated. Although mutual assistance might not be absolutely equal in terms of quantity and form, it exists broadly in human society. Nobody lives in an atomised world, while decisions are based on pre-existing networks, organisations or other ongoing relationships among different persons (OSTROM and AHN 2003: XIII). To improve the comprehension of social capital, the sociological consideration is introduced and the function of social circumstance is emphasised. Individuals and their groups are directly affected and formed by the social environment (THOMPSON 1967: 78). Based on this thought, in network-based methods, the study of social capital is extended to the level of the individual's surrounding circles, such as family, group and organisation (COLEMAN 1990: 302; ADAM and RONCEVIC 2003: 177). In the relevant literature, the characteristics of social capital for effect and common asset are emphasised. Once social capital is utilised, it can benefit all individuals in the related surrounding circles. By the access to social capital, actors can achieve not only personal but also collective goals in the long term. By means of proper regulations and constraints, social capital can be created in communities that lack it (CUSACK 1999: 1; MCCLENAGHAN 2000: 582). To support the argument, empirical examples are provided to present the obvious influence of national institutional structure and policies for the generation of social capital. The network range of society is dependent on the permissive space of civil associations and the governance mechanism of the state. Politics and policy adjustments benefit from relevant research on macro-social capital. In different communities, such as villages, cities and even the nations, the situation of "civicness" is broadly emphasised (PUTNAM 2000; PORTES 1998: 18). The measurement of social capital is a major challenge in the description of a general situation and related change in a large area. Abstract social capital needs to be evaluated by concrete factors. Related correlation was emphasised in PUTNAM'S paper to describe the measurement concept. The resource can be reflected in the rate of organisational involvement and the degree of participatory behaviour in a local society. A dense civil participation network can promote and benefit trust and norms, the crucial features of social capital (PORTES 1998: 20). In the end, social capital in a society is increased and benefits the democratic governance and economic prosperity. The density of a network was selected as a cutting point, which can be assessed by the number of social groups and their membership. The condition of social capital can be described in terms of different statistical surveys on the organisations in a community and the membership numbers in various civil associations. Although the

approach cannot present the mental feature of social capital and related personal interaction at the micro-level, the macro-development of social relations is numerically evaluated in a successful way. Due to the innovative measurement concept, the usage of social capital is transferred into public policy, particularly in studies of civil society. The relevant analytical perspective is also extended from an individual asset to that of the individual's surroundings and to the communities/society. According to different research levels, the measurement context and items can be corrected and modified. To measure them in Indian rural communities, social capital is classified as structural and cognitive forms to facilitate relevant assessments (KRISHNA and UPHOFF 1999: 2). Structural capital concerns the concrete and visible social constructions, such as networks, associations and institutions, while cognitive capital refers to subjective and intangible elements, such as trust and reciprocity.

A survey on organisations and their members in a local community, namely the “Social Capital and Poverty Survey”, was created as a modelling system to investigate the rural groups in Tanzania on micro-, meso-and macro-levels (NARAYAN and PRITCHETT 1997). Later, KRISHNA and UPHOFF developed a scale evaluation procedure to construct the social capital index and to use statistical regression methods to determine the correlation among different variables according to the classification of structural and cognitive social capital. Finally, the structural and cognitive forms are integrated into the vertical system to further promote the measurement concept (GROOATAERT and BASTELAER 2002: 23-24). Based on the contributions of other academicians, the different correspondent indicators from the structural and cognitive aspects were concretised on micro-, meso- and macro-levels. Although remarkable progress was mainly achieved at the beginning of the 21st century with the assistance of the World Bank, different adaptable approaches are applied in scientific literature. Regarding the case study in Yunnan, the measurement system is adjusted and used in the research on the levels of individuals and the community against the cultural background.

5.1.2 The origin of social capital

The origin of social capital presents different forms of social capital and related observational perspectives linked with various emphases and measurable methods. There are generally three dimensions, namely interest exchange, network allocation and cultural influence. The first is theoretically based on the “prisoner dilemma game” and “game theory” that

are rational human behaviour analyses to achieve the maximum benefit and minimum risk. Social capital is generated in the interaction among individuals in self-organised groups. Such groups are considered as a key mechanism to promote civilians' cooperation. They are also the framework to foster trust among group members. Collective cooperation will not emerge if there is only a one-time interaction. This is because defection constitutes a Nash Equilibrium for individuals. It is not the best possible result for all participants. However, no individual will change his opinion, since he cannot obtain additional benefit but only loss. When persons constantly have interactions for a long period of time, the entire situation is changed. Reputation and trust become important. Social norms are also formed within the group. Collective cooperation can be expected. For this reason, social capital is an outcome of iterated prisoner dilemma games. In other words, intensive interaction can generate social norms, a network and trust that facilitate collective cooperation. According to Adam Smith's book, economic interactions within a market are considered as leading to the evolution of social merits such as honesty, diligence and prudence. In reality, repeated collective interaction results in different cooperative criteria (ELICKSON 1991: 4-9; OSTROM and AHN 2003: 12-15). To improve economic development, local social capital becomes a focus in consideration of interest exchange and marketisation.

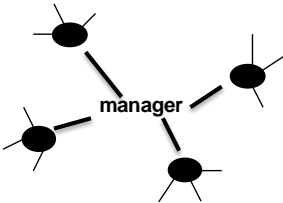
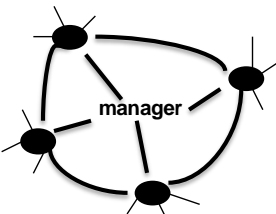
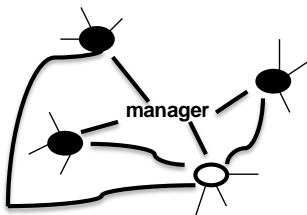
The allocation of social networks is another dimension of social capital. "Network closure" and "structural holes" are typical samples (COLEMAN 1988: 104; BURT 1992: 18). In a network closure, the importance of the social network and structure is emphasised, while the social network is considered as the relationship among individuals and groups embedded in the social structure. The high density of the network is the first characteristic of the allocation. Every individual in the group has direct contact with the others. Information flows rapidly and immediately. The homogenous background of the group members creates a balanced social status. Abundant mutual support can be found within the group and among the members. The manager has less control benefit due to the abundant information and high level of interaction intensity. This increases the likelihood of participants' cooperation within the group, whereas the linkage with the outside is fragile. The characteristics of the network lead to a closure condition that can create social capital and relevant support for each member (COLEMAN 1990: 310). Although the distribution and structure of the network can increase the cohesion among participants, it can also be linked to distrust and immorality caused by the "structural holes" condition. Structural holes refer to the type of weak connections

existing between various groups and persons in a specific extensive social network. Complete and timely information transfer becomes less possible, since the linkages among participants are not dense enough. The social status and function of members become less equal. There are brokerages within the network, which can produce more resourceful and competitive advantages for the persons who can control the information transfer. Although weak connections facilitate the emergence of distrust and misunderstanding, social capital can still be generated during the process of interaction and benefit the stability of the network. In brief, various allocations of the network can create social capital, either from weak or strong connections. In reality, both networks are expected, such as in the coffee villages in Yunnan, China. In a local community, certain collective units probably represent the characteristics of network closure. There is high cohesion and performance efficiency in the group, while the group probably shows a certain distrust and repulsion towards external persons or institutions. The structural holes can possibly appear in the linkage between local social groups and certification initiative. Due to the shortage of capacity and finances, it is difficult for farmers to have a constant direct communication with the certification initiative. It is always necessary to have a manager or coordinator, who has large control benefits with less inspection constraint, to assist in the Fairtrade certification.

The different allocation of networks is directly related to power, control and sanction. The development of shared norms and related punishment benefits the generation of social capital and increases the cohesion level of a community. In an open structure, collective sanction is difficult to be applied. Without an effective norm system, personal behaviour cannot be guided and monitored. Participants have less concern for reciprocity and long-term interests. Reputation and trust are accumulated with difficulty among members, which can usually be increased in a closure group (COLEMAN 1988: 107-108). The power, originating from cohesion, is limited to regulating participant activities. On the other hand, an open structure and structural holes can generate power and sanction ability for individuals, working as a gap-filler. Related competitive advantages can be presented when they connect two individuals and avoid a direct linkage. Since the information flow is managed by the gap-filler persons, they have the control benefit. Power can differ in the various strengths of the relation and functions of participants. To better illustrate the situation, four related indices were developed, namely network size, density, hierarchy and constraint (BURT *et al.* 2000: 123-147; BURT 1997: 355). By the utilisation of the indices, entrepreneurial, clique and hierarchical networks were

concluded from the different allocations to describe the information and control benefits for the gap-filler person (Table 11). From these, the clique network can possibly contribute to the establishment of Fairtrade cooperatives in Yunnan, since its high linkage density can partially avoid structural holes and limit the control benefit of brokerage. The high level of information transparency among participants can create social support and have a monitoring effect on the manager or coordinator.

Table 11: Three network forms of social capital

Name	Network indices	Structure	Condition	Network Forms
Entrepreneurial Network	Network size: 4 Density: 0.0 Hierarchy: 0.0 Constraint: 25.0	Sparse and flat structure	Abundant structural holes, low redundancy, creates information and control benefits for the manager	
Clique Network	Network size: 4 Density: 100.0 Hierarchy: 0.0 Constraint: 76.6	Dense and flat structure	No structural holes, high redundancy, creates social support, but minimal information gains and control benefits for the manager	
Hierarchical Network	Network size: 4 Density: 50.0 Hierarchy: 16.8 Constraint: 68.4	Sparse and center-periphery structure	Structural holes borrowed from strategic partner mean second-hand information and control benefits for the manager	

Source: Burt, R., et al. (2000)

While structure hold and network closure describe the allocation of network and related effects, ‘bonding’ and ‘bridging’ were introduced in 1998¹⁰ to depict the nature of linkages (GITTELL and VIDAL 1998: 8). The virtual features of connection are considered as defining properties that can provide specific advantages for the participants (WOOLCOCK and NARAYAN 2000: 7). Bonding means that connections, by choice or necessity, intensify

¹⁰ In 2000, Woolcock mentioned linking capital as the third form of social capital, which refers to relations between different social strata in a hierarchy where power, social status and wealth are accessed by different groups. It is however not widely accepted and applied.

the internal factors of homogeneous groups and tend to repulse the external ones from the outside. In the contrast, bridging refers to the linkages which are stretched out and involve various persons beyond the social border of different groups (PUTNAM 2000: 22-23). In order to describe the effects on individuals at the community level, both types of linkages were characterised by different combinations and studied in a matrix (WOOLCOCK and NARAYAN 2000: 9). Due to their simple and practical classification, these are widely applied in the fields of poverty alleviation and economic development to analyse the situation of individuals and organisations (BEUGELSDIJK 2009: 2-5; NARAYAN 1999: 1-2). From the classification, it is clear that poor villagers usually have high bonding ties within the community and low bridging networks with outside (Table 12). In this case, it is interesting to link the theoretical description with the research contribution, since a successful Fairtrade certification can probably extend farmers' external connections, solve farmers' interregional market barriers and promote agricultural development. The certification initiative has a coordinating function between international or national traders and local farmers. The participation by capable managers can also create bridging connections to rural communities.

Table 12: Dimensions of social capital at the local level

Extra-community Networks (Bridging)	Intra-community Ties (Bonding)	
	Low	High
Low	Outcasts	Poor villagers
High	Recent rural-to-urban migrants	Successful members of micro -finance programs

Source: Woolcock and Narayan (2000: 231)

The third research approach is the utilisation of cultural or religious phenomena to explain the origin of social capital. Social capital is generated from hierarchical administrative systems, which creates value, criteria and expected compliance. Examples can be found in many religious and cultural systems, such as Confucianism. Social capital and related factors may be inherited for generations in a procedure of “*socialisation that involves much more habit than reason*” (FUKUYAMA 2001: 16). Although culture is considered as a phenomenal concept, its forms have the appearance of reflecting social capital. It is also presented in the research, since the cultural heritage has direct impacts on local social capital and the related cooperation. Culture manifests itself not only in superficial ways, such as symbols, heroes and rituals, but also in norms and trust (HOEFSTEDE 2001: 1; KIESER and WALGENBACH 2007: 109). These are important factors of

social capital (GROOTAERT and BASTELAER 2002: 3-4). They can also increase the effect of cooperation and facilitate the formation of collective power to protect farmers' interests and enhance their income in the context of market competition. The intention of the study is to research local social capital and the feasibility of collective action, for example a farmers' cooperative within the framework of Fairtrade. Trust is the key between social capital and collective action (OSTROM and AHN 2003: xvi). Without a high level of trust, cooperation and the relevant activities cannot be expected. In the next section, trust, as a fundamental component of social capital, is introduced.

5.1.3 Trust: an important factor of social capital

From the descriptions by significant experts, it is not difficult to recognise that some components of social capital overlap, while others are not generally accepted. However, trust is frequently mentioned as an important feature of social capital. It can be appropriately and comprehensively grasped on different scales. The research scope is dependent on relevant objectives and purposes. For example, social value (especially trust) and social network were studied in the Italian civil society from the macro - perspective (PUTNAM 1995). Trust and its outcome of "collective action" can be observed at the micro-level (OSTROM and AHN 2003: xi), while community is a proper meso-scope for research on trust. In a community environment, trust can be analysed and reflected by different factors, such as common knowledge, public norms and active rules. It can be based on recognition and acquaintance among different individuals (BOURDIEU and WACQUANT 1992: 119), while the relationship between acquaintance and trust in a close community is correlative in Chinese rural society (FEI 2007: 9-10). It is possible to elevate informal relationships from family to all forms of "familiar" triggered by trust and reciprocity. Acquaintance and reciprocity are crucial features linked with trust at the level of community. They can be important elements affecting farmers' decisions and influencing the performance efficiency of related collective units for Fairtrade certification. They can be benefited by close relationships, sufficient information, timely communication and cooperation experience among group members. From the vertical aspect, the research of trust shows different emphases on the micro-, meso-and macro-levels. On the one hand, trust can be described according to various types of observational objectives. General and specific trust is one of the well-known classifications. General trust is a global and rather affective attitude, while specific trust is more focused on the singular and cognitive (SCOTT 1980: 811). For general trust,

a single person is considered as a representative of a group, and it is not based on his or her specific characteristics. Therefore, it only exists in a plural vision (SEIFERT 2001: 24). On the contrary, specific trust is settled on a concrete person and proven in the personal experiences (BUTLER 1991: 643). It is based on perception and digestion of the multiplicity by an actor according to situational information. It is a reflection of an individual decision related to a certain person within a concrete context (SEIFERT 2001: 25). Likewise, “distance” can be used to express the different types of trust, such as thick and thin trust. Thick and thin are specific interpretations to describe the density of trust, encompassing a social distance between truster and trustee. Density and distance usually have a positive correlation in the research of trust. This means that an individual tends to believe in the people close to him or her, while relevant trust is reduced and becomes thin with a long radius (PUTNAM 2000: 466). Due to the visual and understandable definitions, these are often applied in the study of interpersonal trust within a society. On the other hand, trust can be understood from its source, such as characteristic and process. Characteristic-based trust is related to the specific features of the transaction partner, such as the ethnicity, religion, age or role. Process-based trust is generated from the concrete experience and history of the transaction (ZUCKER 1986: 53). Similarly, proper competence can contribute trust. To meet the specific technical requirements, the person has to present his appropriate ability to win “competence trust” (BARBER 1983: 14). In contrast to this, general trust originates from the moral and responsible intention of the action (EBERL and KABST 2010: 117).

Trust can also be studied from the perspective of the person-organisation relationship. One highlights the relationship between the organisation and the individual, whereas the other focuses on the intra-organisational relationship between individuals within the organisation. The individual can generalise the trust of a concrete institution and organisation, namely institutional trust and structural trust (SEIFERT 2001: 15; SCHWEER and THIES 2003, p43). Institutional trust is based on the affirmation of targets and principles of the institution that are assumed to be properly performed (LAHNO 2002: 356). Relevant regulations within the institution are generally official and in writing, which can be proved from the documentation and records. This trust does not demand a critical knowledge of the valid rules of the institution (NEUBAUER and ROSEMAN 2006: 140). This means that the individual does not need to know the exact related information to be able to trust in the institution and its rules. The legal system is a good example to demonstrate such trust. The individual does not

need to know all the items, functions or details of the laws to be able to believe in the system. He can conclude a deal with others by means of a contract. All participants consider the legal system as being able to support and guarantee the relevant performance according to the contract, while they probably do not know the concrete juristic regulations and processes. Furthermore, the brevity or vagueness of the relevant legal information increases the deterrent of the system. To avoid the possible realisation and consequences, people recognise the power and follow the rules. The avoidance of sanctions is indispensable to the functioning of power (LUHMANN 1979: 121). For this reason, institutional trust has less relationship with single experience and personal reliability, but more linkage with the general preference and application of institutional rules (LAHNO 2002: 358). The comprehensive utilisation of institutional power can reduce the risks in Fairtrade certification, increase participants' confidence and simplify the managerial process. Different stakeholders in the certification process can also be regularised, inspected and constrained, especially by the manager or coordinator who has large control benefits. For example, contracts and agreements can be introduced in the whole certification process for all participants. Related juristic obligation can facilitate the regulation, reinforcement and inspection of the management system in farmers' groups and largely guarantee each stakeholder's interests and responsibilities.

The persons in the institution bring their ambient orientation (institutional trust) in the organisation and partially affect structural trust, since they are not isolated in the organisation (ENDRUWEIT 2004: 243). Structural trust relies on the norms and relevant mechanism within the organisation and the relevant culture, such as structuredness and corresponding regulations, which benefit trust (NEUBAUER and ROSEMAN 2006: 141). The rules are in the nature of things and supported by the local value system and tradition. They are usually not in written form. However, related trust cannot be ignored. The power of structural trust is reflected when members accept, obey and support the organisation's norms in their interactions. Structural trust has potential in the formation of an organisation with a high trust level (ORTMANN 1994: 164). From the view of power, norms are insofar a component of control arrangement (ORTMANN *et al.* 1990: 24; LANG and ALT 1996: 362). Distributive and authoritative mechanisms are calculated to support the performance of norms (ORTMANN 1994: 153; GIDDENS 1995: 316). The formers are achieved by the control of material items, such as objects and goods. The authoritative mechanism links the control with the person and the relevant role allocation. Norms correspond to legitimation

and sanction by means of formal and informal social values (MÜLLER 1992: 181). On the other hand, norms and relevant mechanisms are a concrete interpretation and orientation pattern. They have to be performed and represented by specific persons (SCHWEER and THIES 2003: 44). The importance of representatives to embody the operational intention of organisation is described (EBERL and KABST 2010: 119). Once representatives are able to create or maintain the cognitive harmonious circumstances within the organisation, members are likely to trust in the structures and rules, even without relevant concrete experience (NEUBAUER and ROSEMAN 2006: 141-142). If there are several groups within the organisation, representatives can possibly function as “boundary spanners” (e.g. top managers) who have an important role in the establishment of a trust relationship among various groups (EBERL and KABST 2010: 120). Their behaviour is considered not only as individual conduct but also as a representative’s action in an organisational context. With obvious organisational commitments, collaboration can be undertaken by relevant representatives who usually have two functions, namely crossing and demarcation (SYDOW and DUSCHEK 2011: 51). It is not easy for them to position their personal identity between “we” and “you”. ELLIS and YBEMA (2010: 279) studied this challenge in their research. They discovered that representatives can handle the stress of functional contradiction and have a balanced identity with the aid of practice and experience. They can possibly play similar roles in the Fairtrade certification in Yunnan. Whether relevant representatives exist is one of the main targets of the data collection process, while additional focus is on their attitude and behavior.

In contrast to the relationship between the organisation and the individual, intra-organisational relationship emphasises interpersonal trust. There are generally three different interpretations of this. In the first one, trust is illustrated as a special or emotional feeling from the aspect of philosophy (BAIER 1986: 231). The earliest descriptions can be traced back to the time before Christ in the writings of PLATON (PLATON 1974: 583; ARISTOTELES 1980: 1378). The core of the opinion is that trust is not studied by its expressive phenomena, such as institution, interaction, interest, cooperation, etc., but by itself (its real meaning). The interpretation of trust is challenged precisely on the point of its abstract and idealistic flavor (BACHMANN and LANE 1997: 83). For this reason, the emphasis in research is not focused on the real meaning of trust from the philosophical aspect, but on the identification and classification of various trust intentions by means of different indicators and identification methods (the details of which are introduced in section 5.3).

In the second interpretation, trust is introduced as a positive attitude for a concrete person or abstract entity (LUHMANN 1989: 45). It is a type of meaningful assumption of future dealings with others in situations that are limited on a certain distinct scale. The truster offers his trust to a trade partner. The trade partner is aware of it and reacts correspondingly. This could probably be a virtuous interaction. However, the trade risk is remarkably large, since the trust comes with relatively less sanction (NOOTEBOOM 2002: 45). The truster can easily be cheated by or disappointed in his trustee. For this reason, trust is actually based on an illusion (LUHMANN 1989: 23). The person simply ignores the truth that the relative information to support a judgment of trust is not sufficient. Such a wilful illusion is possible in particular, when an emotional bonding between the trade partners exists (EBERL 2004: 263-265; REMPEL *et al.* 1985: 95). With similar concepts, the impacts of trust in the fields of leadership competency and power structure stability are emphasised. In a cognitive organisation, members can even give up their own interests and obey leaders' decisions (BARBER 1983: 14; 173; WALTER-BUSCH 1996: 198). It is clear that such an organisation has remarkable performance efficiency and effectiveness, when local cultural and institutional conditions can provide strong social support and a related value system. Therefore, integration into the local social and institutional situation is important for Fairtrade certification and the relevant farmers' cooperatives in Yunnan, China. It can optimise the organisational structure of associations and the related management process.

In the third interpretation, the rational choice approach is dedicated to respond to the dilemma caused by the risk in the interaction of individuals. Here trust is a certain rational expectation, based on information on the trade motivation of the actors (ROTTER 1980: 1). Trust accepts a certain risk with regard to the possible action of others (LAHNO 2002: 14). Unlike LUHMANN's description of trust connected with altruistic performance, the trust in a rational choice approach is based on the participants' egoistic motivation (BACHMANN and LANE 1997: 83). The maximum personal profit is the final target of the actors. The individual's decision is generated on the base of risk and possible reaction. To some extent, it provides an integrity analysis process. Many features can be included as parameters in mathematical modeling and the relevant eco-sociological research. However, the possibility of precise calculations in a complex and volatile society is always questionable.

It is clear that a trustful relationship among stakeholders can promote cooperation, reduce transaction costs and increase performance efficiency

(KIESER and WALGENBACH 2007: 37). To better observe the procedure of cooperation, it is necessary to dynamically study members' interaction and collective action within the group. In the next section, OSTROM's theoretical modeling is introduced to describe the core relationship and interaction of actors in two theoretical scenarios.

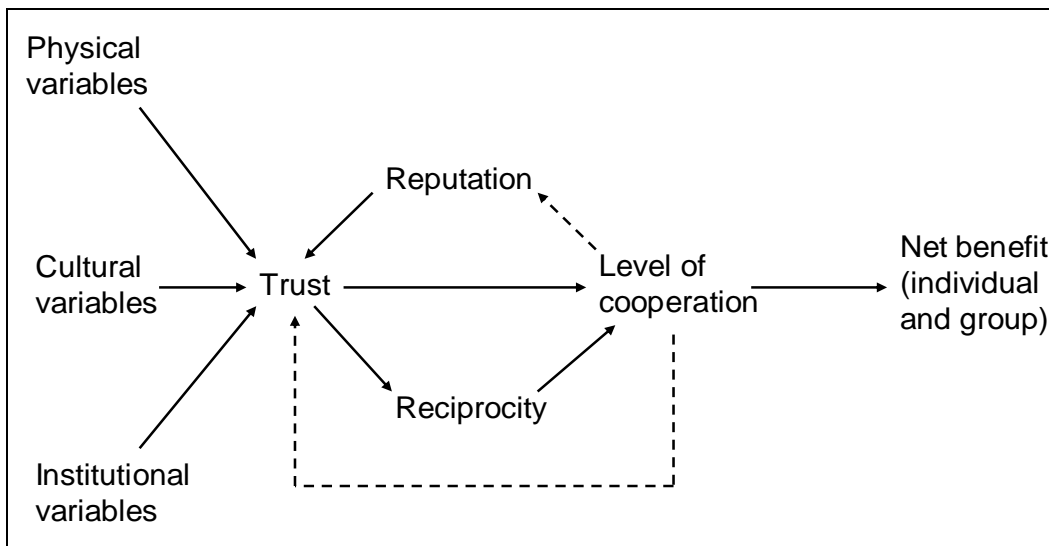
5.2 Determinant and dimensions of group interaction

Reciprocity, reputation and trust are important features of OSTROM's theory. The author uses a rational behavioural explanation to define relationship and contributes a relevant model. There are several preconditions (OSTROM and AHN 2003: 49):

- Rationality is displayed by every participant.
- Based on previous experience and education, reciprocity might be generated.
- The personal will has a positive correlation with reciprocity interest.
- The sanction frequency has a negative correlation with free ride.
- Trust is strongly influenced by norms, information flow and reputation.
- The risks of reciprocity and related trust are evaluated by participants.

The preconditions reveal the interactions. Trustworthy reputations encourage actors' investment of trust. The possible reciprocity norms encourage actors to cooperate in order to achieve final net benefit. When the benefit is successfully achieved, initial cooperation will usually continue further and more extensively. More actors learn to trust and choose to cooperate with others. Reciprocity also tends to be widely adopted. Ultimately, the trustworthy reputation leads to a virtuous cycle, while trust, reputation and reciprocity have a positive correlation (Figure 19). It can likewise be stated that a decrease in any one of these will create a negative chain reaction (OSTROM and AHN 2003: 50).

Figure 19: Feedback in repeated social dilemmas



Source: Ostrom (2003: 51)

With these core relationships, several factors are mentioned in particular by Ostrom, namely face-to-face communication, norms and symmetry. These factors are not separated, but affect each other mutually. Face-to-face communication substantially changes the structure of a situation. By constant contact, each actor can evaluate his input of trust of a possible agreement with the consideration of collaborative contribution. Communication enables the participants to make their own judgements about the trust and reliability of others (Ostrom and AHN 2003: 51). On the other hand, norms are also an important factor related to reputation. A symmetric condition of inputs and outcomes can certainly facilitate the agreement. However, the optimum and homogenous effect cannot be found everywhere and all the time. The power of norms allows participants to obey the agreement. A participant can, therefore, maintain his own reputation for cooperation. Tongue-lashing is applied as an example to explain the interrelationship between norms and reputation. People in the group deliver a tongue-lashing to the violator at each opportunity of communication. His reputation is threatened. He usually displays the correct reaction to the correction if he does not want to be isolated. In a small group, tongue-lashing has a particularly good effect and contributes to a high level of cooperation, since the violator cannot use the information void to cheat without risk to his reputation. Concerning equality, norms can efficiently benefit the achievement of agreement in an asymmetrical situation. In a heterogeneous circumstance, fairness norms can contribute to the validity and sustainability of the agreement (Ostrom and AHN 2003: 51).

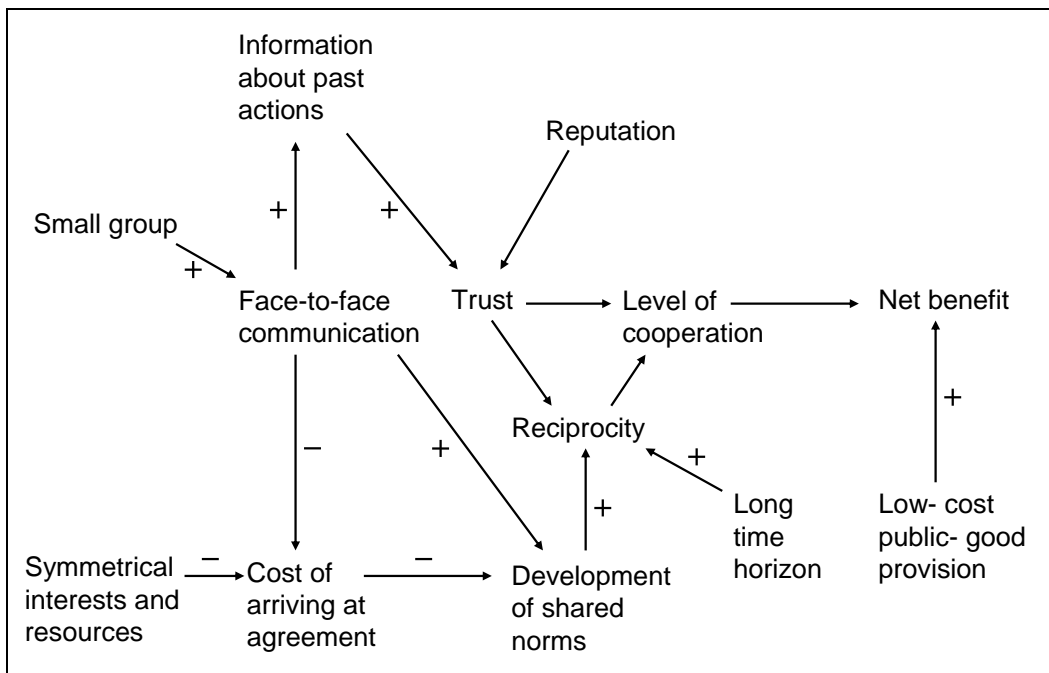
OSTROM introduces two theoretical hypotheses of how exogenous factors comprehensively influence endogenous factors connected to the aforementioned core relationships. The alternative theoretical scenarios provide an image of the type of theoretical development that can be based on a behavioural theory of collective action. A homogenous group can possibly be found in the simple scenario. A representative might have a linkage bridge as his contribution to the group. While the delegation system seems to be a solution to face the challenges in a complex situation, external support can be necessary to facilitate the structural establishment of a Fairtrade farmers' cooperative in Yunnan.

5.2.1 A simple and conducive scenario

This is a case with a small number of actors, i. e., 10 farmers, symmetrical interests/resources and sufficient information. It is easy for a few actors to engage in face-to-face communication due to the relatively simple interaction situation. It is also easy to arrive at a contingent agreement or shared norms with the assistance of symmetrical interests/resources and communication. The performance of the agreement is not difficult to be monitored. The total cost of achieving and maintaining an agreement is relatively low. Adequate information about past actions reinforces trust among participants. In this 'easy' situation, it can be predicted with some confidence that a large proportion of actors will find a way of cooperating (OSTROM and AHN 2003: 56).

Exogenous variables can be compactly centralised in a small group, balanced interest/capital, long term and public good with low cost, connected to the physical productive function. There is a positive correlation between exogenous and endogenous factors. The complete provision of exogenous variables can enhance the probability of endogenous factors that are reflected by the application of face-to-face communication, the agreement achievement with a low-cost progress, the formation of norms, and the abundant information about the past (OSTROM and AHN 2003: 56). It is the endogenous factors that can facilitate the possibly positive cooperation in this case (Figure 20). In the simple and conducive scenario, the level of trust is expected to be high, which contributes to cooperation and related net benefit. It is the main line and core relationship in the scenario.

Figure 20: A simple scenario of collective action

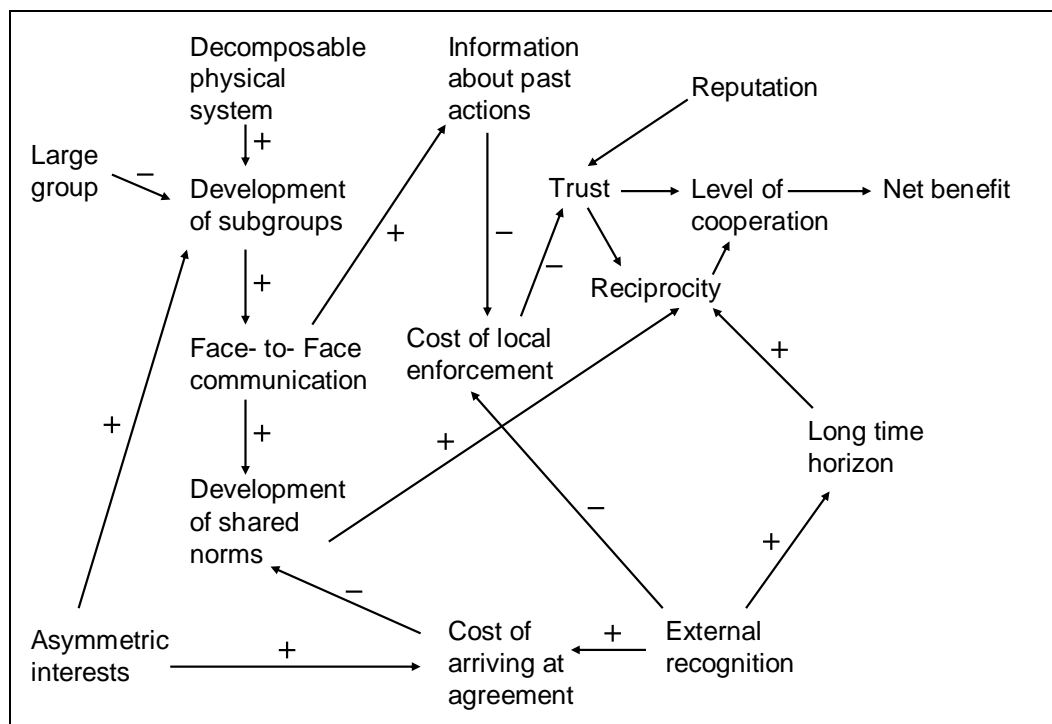


Source: Ostrom (1998: 15)

5.2.2 A complex and difficult scenario

At the other extreme, Ostrom (2003: 59) presents a difficult situation with a large number of participants (e.g. 15,000 farmers), imbalanced interest/capital and a fragile productive system (Figure 21). The core relationship among trust, cooperation and net benefit is still the research focus in the complex and difficult scenario. As complexity increases, the level of trust, cooperation and benefit decreases. The variables have opposite effects compared with the simple scenario.

Figure 21: A complex scenario of collective action



Source: Ostrom and Ahn (2003: 59)

In a large number of group members, face-to-face communication is impossible to be organised and conducted. There is not enough information about the past actions of everybody. In the group, reputation and reciprocity are diluted to a certain extent due to the large number of members, great spatial distance, short-term horizon, and complicated interaction process. The function of different variables is limited for the members. It is likely that no group will achieve efficient cooperation and a final profit if the promotion institutions cannot be developed (OSTROM and AHN 2003: 60). Although the recognition of external authorities can possibly facilitate the operation process in the group, the internal development of local associations is important for all actors. Therefore, it is focused on the establishment of local institutions for the necessary management and inspection. OSTROM (2003: 60) offers five development steps to facilitate the cooperation and to build up the association:

- The relevant area is divided into main territory, territory and sub-territory.
- Associations can be built up and managed by a certain number of farmers to achieve their profits.
- Different associations are established at the level of territory, since the economic advantage in the initial group is recognised by the others.
- Several associations start to collaborate and affect the main territory.

- Finally, the whole area is covered by the federated associations at several levels, while a large number of farmers can join in the system.

In the scenario, the exogenous factors refer to group size, imbalanced interest/capital, distributed productive system in different linked subgroups, and authority for the establishment of relevant associations (OSTROM and AHN 2003: 60). To achieve cooperation, the complex scenario could be transformed or divided into some easy and enforceable settings, known as “*endogenous processes*” (OSTROM and AHN 2003: 61). A long-term benefit and efficient inspection system can be expected in the small organised unit, while the participants can gradually accept and trust other group members. Later, the successful experiences can be summarised and promoted throughout the whole region.

In the process, the most important factor is the endogenous transformation of exogenous factors related to the core relationship (OSTROM and AHN 2003: 61). The impact of external authorities is crucial for the self-management of local organisations to have an effect. External authorities should respect and not challenge the rights of local organisations, especially regarding the punishment of rule and agreement breakers. In this way, they execute “*external recognition*” of the group and its rules (OSTROM and AHN 2003: 61). If local authorities support a rule breaker and use their judgment standards, the local organisation with its sets of rules, agreements and sanctions will no longer be respected. Their agreements to enforce reputation and reciprocity are no longer effective and do not contribute to higher levels of cooperation. The respect of local (in)formal rules arises from recognition. External authorities could offer constructive assistance, such as improved technical provision, efficient management, strengthening of local rules, and facilitation of information exchange. The productivity, trust and reciprocity in local organisations could benefit from the support of external authorities. Over time and with positive experience, persons in local organisations will also recognise and accept the external authorities (OSTROM and AHN 2003: 61). In the end, a federated association at several levels with a large number of farmers can be built up in the region. The five-step concept provides a theoretical basis for the set-up of Fairtrade associations. The importance of external assistance is also recognised, while the representatives are necessary to work as bridges between external authority and local groups.

5.3 Measuring the performance of Yunnan farmers' groups

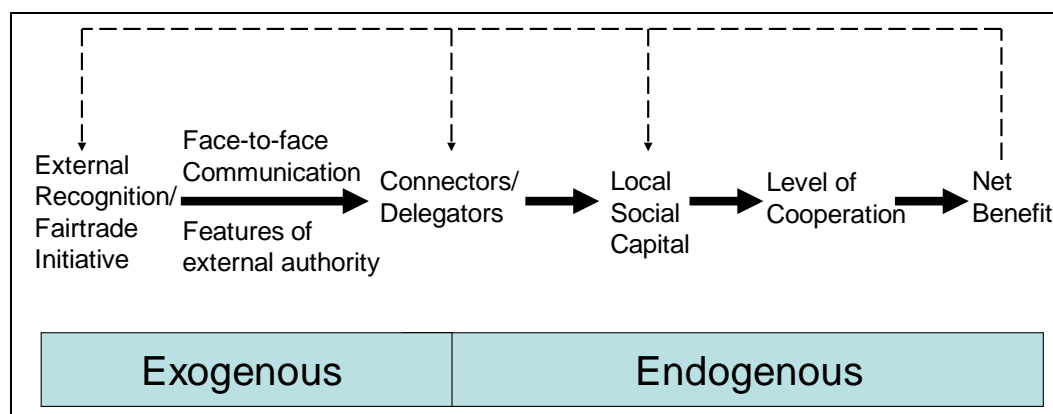
Research cannot be aimlessly conducted in an artificial and anonymously designed situation like an experiment. It has to relate to concrete conditions and the specific purposes of the research. The research is conducted in a rural mountainous region of China. Since the region has specific eco-social conditions with cultural and traditional characteristics, it is necessary to develop Ostrom's theory and concept for the application in the research. The intention of the research is to analyse the local situation from the perspective of social capital and to provide constructive implications for the set-up of Fairtrade cooperatives in Yunnan, China. To achieve this purpose, a research framework is presented according to the local situation and prior theoretical descriptions. Thereafter, the operationalisation factors and measurement indicators are generated to assess and report on local social capital.

5.3.1 Research approach deviation

The introduction of external authority is an important issue, since exterior assistance is necessary for the set-up of Fairtrade cooperatives, especially in the beginning phase. The external authority can not only extend the network of local farmers but can also contribute human and financial resources. However, the external institution first of all has to obtain the recognition of the villagers, especially in the situation of a structural hole. The sparse linkage with the local farmers increases the control power of the external authority, the uncertainty of the certification, and the hesitation of villagers. To compensate for the widespread risks caused by the shortage of information and capacity, the external authority needs to present its professional competence, bridging function, institutional background and juristic constraint to convince other participants and benefit the cooperation. To facilitate the introduction, a certain share of the controlling missions can be transferred to the institutional system and the local authority. The complexity level and cost of management is intended to be reduced to some extent in the Fairtrade farmers' cooperative. In the research, different local organisations are studied to search for a qualified external authority. This could be an original association with a bridging network, or an exterior institution with bonding linkage among local people. At the same time, compatibility between external authorities and local groups has to be taken into consideration. A balance between the coherency in a big cooperative and the specificity of different groups is difficult to maintain. Any improper activity can probably cause disaggregation of a big association and damage

to social capital. A connector or representative is needed to link the exogenous authority with local groups. It is not only a kind of endogenous process but also an access to local social capital. The efficient usage of local resources can largely reduce investments and maintenance costs, while the external authority can make a contribution to the fields of human and financial capitals. A good linkage can facilitate the access to different livelihood resources and benefit the set-up of Fairtrade cooperatives. The delegation system is assumed to be an effective pathway to optimise the management of a large farmers' cooperative. The large number, physical distance and time limitations increase the difficulty in intensive interaction of the members with others, especially when they are widely dispersed in different villages and groups. The delegation system and relevant representatives can possibly solve these problems and increase the efficiency of organisational performance. Every representative is a 'boundary-spanner' between the external authority and local homogenous groups (Figure 23). His/her connection with other members is close and original. Only individuals with a high level of reliability and good capabilities can be chosen as representatives, since they represent not only themselves but also the image of the collective unit. They can be considered as group leaders with strong decision-making powers. Members know and trust them well with a high obedience level. Due to the exceptional operational effectiveness within the group, the regulations and decisions of the cooperative can be accepted and performed with certain efficiency. However, the relationship between the external authority and the representatives is not so positive. The external authority is new to them and needs to win their recognition. It is necessary to have face-to-face communication to increase confidence. The features of the external institution, such as technical competence, juristic constraint, bridging function and institutional background, are crucial for recognition. If the whole process is successfully accomplished, cooperation and net profit can be expected. Benefit can, in turn, positively affect all variables in the procedure. It is a circular and self-improving system.

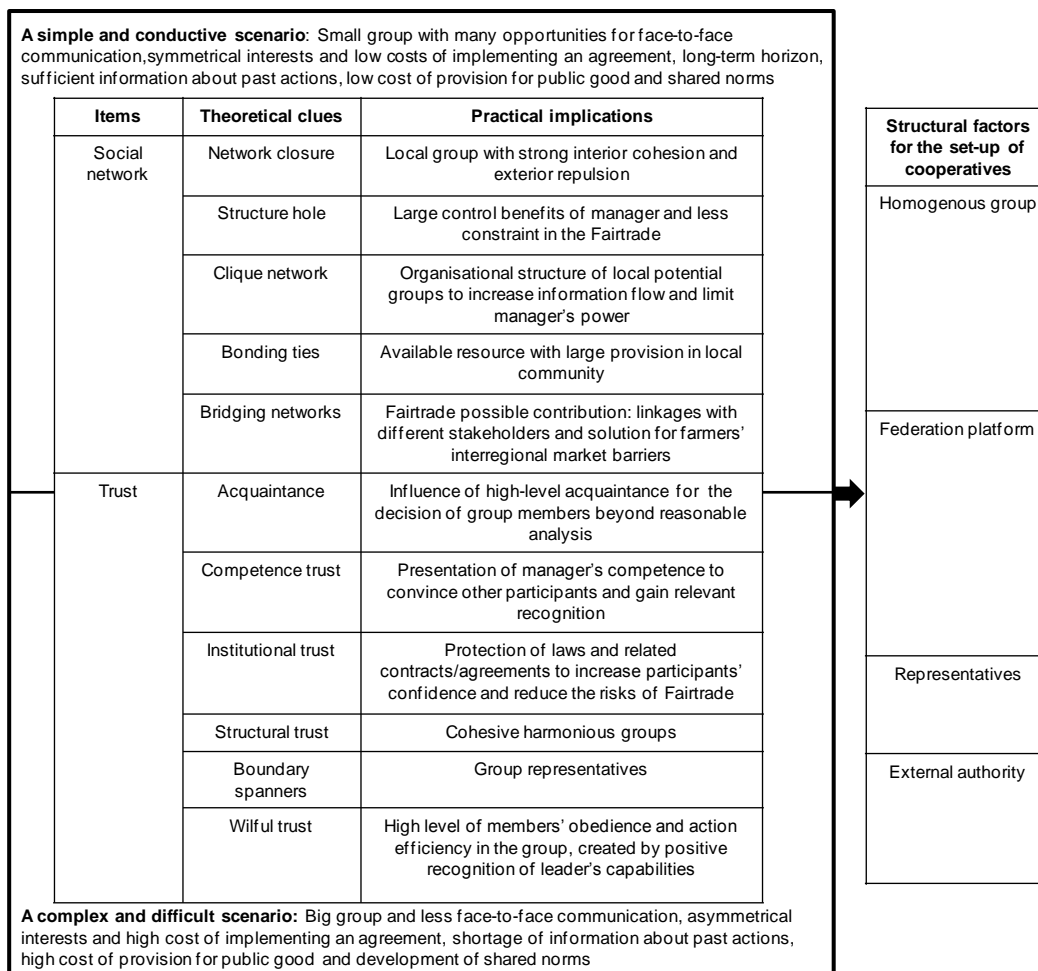
Figure 222: The performance process



Source: Author (2011)

From the description of social capital, several specific concepts are selected, such as bonding linkage, bridging network, structure hole, institutional trust, boundary spanner, etc. Since the research aims to provide constructive implications for the establishment of Fairtrade cooperatives, the four structural factors, obtained from Ostrom's model, are targeted. Combined with the aforementioned concepts, four factors are going to be described and identified to promote cooperation and benefit the Fairtrade farmers' cooperatives. These are homogenous group, federation platform, representatives and external authority (Figure 23). A homogenous group has no structure hole. Members have a direct and close connection and communication. They know each other well and believe in the group. With certain cohesion and closure, the collective institute represents high performance efficiency, and functions as an operational unit within the delegation system. In each homogenous group, there are representatives. Their technical and leadership abilities are recognised by other members. Their advice is respected and followed. As boundary spanners, they can effectively coordinate with the outside and represent the interests of their own group. In addition, the support of an external authority is necessary to successfully establish a Fairtrade cooperative. It provides important bridging network and technical competence. Although it is unfamiliar to local members, the proper application of relevant laws can enhance corresponding institutional trust, and optimise the management of the delegation system. Based on contracts, the risk of a structure hole, which can be generated from the clique structure, tends to be significantly reduced.

Figure 233: Four structural factors for the set – up of famers’ cooperatives

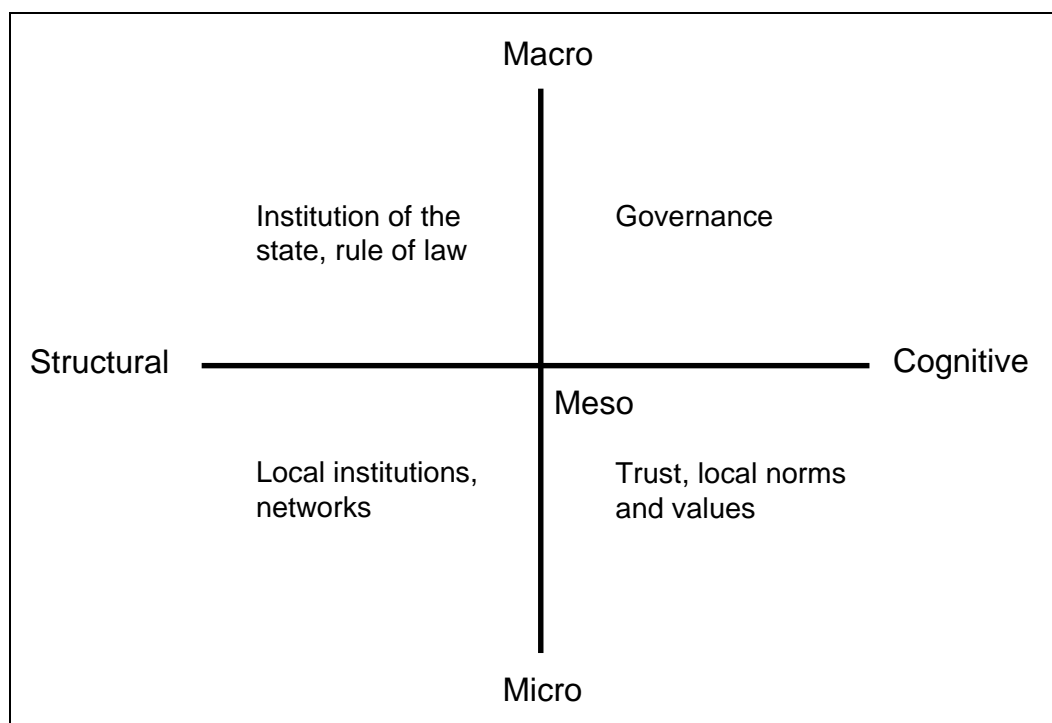


Source: Author (2013)

To describe and identify the four factors, it is necessary to evaluate local social capital and choose the relevant indicators. The selection of indicators is mainly based on the measurement template of GROOATAERT and BASTELAER (2002: 3-4). Social capital is divided into structural and cognitive forms. The two concepts are classified from two dimensions, namely personal consciousness and appearance. The structural form is more objective and independent of recognition. For this reason, it is easier to be observed and assessed. The evaluation of this form is often represented by numbers and statistical modelling, such as the quantity, density, frequency and size of indicators. On the contrary, the cognitive form is more subjective and related to personal awareness, such as trust and reciprocity. Due to its abstract characteristics, it is more difficult to detect and define. However, nobody can deny its existence and influence. From a vertical perspective, social capital is classified on three levels with concrete characteristics (Figure 24). Since the research is made in the local areas,

micro-and meso-levels are the research emphases. On the micro – level, cognitive components can be defined in terms of trust, norms and values, while the local institution is related to network. On the meso-level, the observation is illustrated by groups and associations on the scale of region. This is a scope which captures horizontal and vertical relations between the two other levels.

Figure 244: Forms and scope of social capital



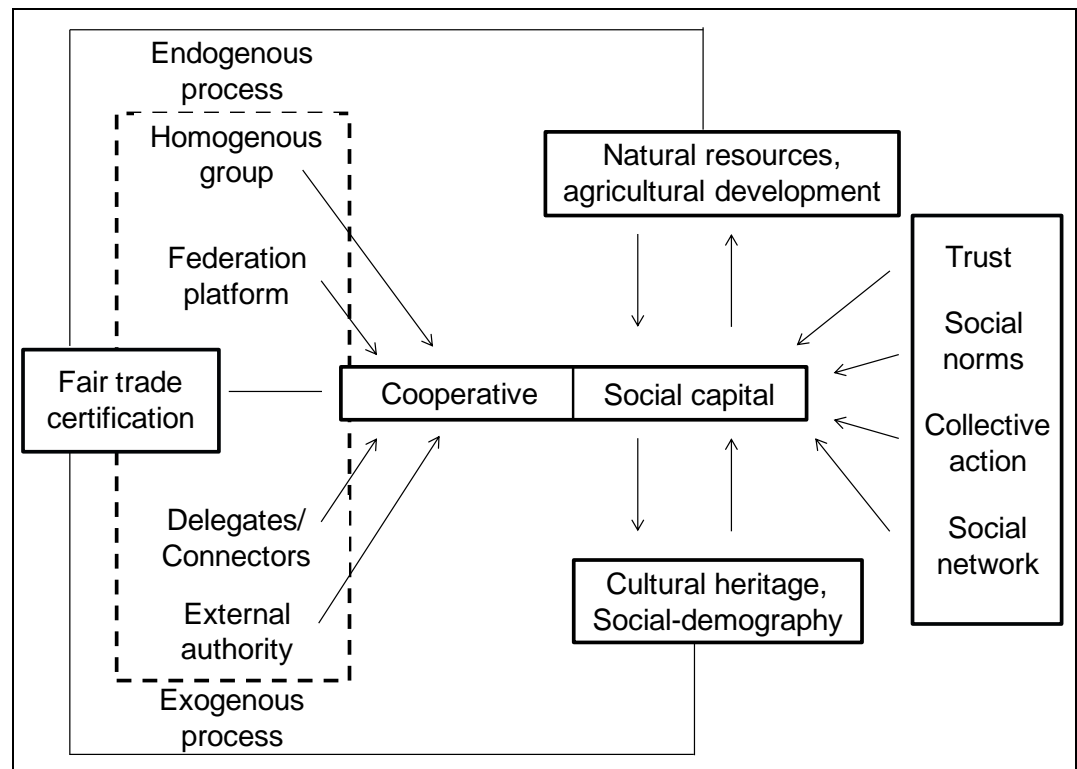
Source: Grootaert and Bestelaer (2002)

Since most studies on social capital have been performed on the scale of nation or region, it is essential to make some adjustments for the village-wide research. The selection of indicators is important. They reflect most forms of social capital and can be divided into four main aspects: indicators of trust, norms, network and collective action. These are the source and outcome of social capital. Trust and norms are used to describe cognitive social capital. Collective action is the third indicator as an outcome of social capital. It is an important aspect of community life, and can be utilised to study local social capital and its changes. From the view of structural social capital, social network is a crucial factor to show the influence range of social capital. The exterior variables can possibly affect local society if the external links are intensive and broad. A social network also has a strong interrelationship with local institutions. Institutions can partially be considered as a type of expression of social network, while their application

and influence can be found in norms and collective actions. Institutions are integrated with other indicators to clearly indicate the structural factors and avoid unnecessary overlap.

To achieve cooperation for Fairtrade certification, the farmers' cooperative is the focus of analysis from the perspective of social capital. Social capital is the core and cause to promote cooperation and achieve profit, while the cooperative has to be built up according to its socio-economic conditions (Figure 25). Apart from these, exogenous and endogenous processes are important concerns for the set-up of the cooperative, which is strongly influenced by social capital. According to Ostrom's five developmental stages, the homogenous group is the basic operational unit of a big cooperative. Members in a homogenous group know each other well and can easily obtain an agreement to increase the performance efficiency and reduce related negotiation costs. It is a reflection of an endogenous process that refers to a simple and enforceable setting. While maintaining the vitality of the homogenous group, a federated system can be built up. Based on the homogenous groups, the federated structure can solve the shortage of social capital among a large number of members and to facilitate the cooperation of individuals. The federation platform and relevant representatives provide crucial bridges for the external authority to enter the local social capital and benefit the set-up of farmers' cooperatives. At the same time, the Fairtrade certification is related with various local requirements of natural resources, agricultural development and cultural heritage. Furthermore, the socio-economic background links with local social capital that can be evaluated by four indicator bundles, namely trust social norms, collective action and social network. The analysis framework has an intersecting structure. The study of the local socio-economic situation and social capital can be considered as the research input, while the study outcome is the description and identification of the four structural factors to provide constructive implications for the establishment of a Fairtrade farmers' cooperative. In the next sector, the research operationalisation will be presented to interpret the study input.

Figure 255: The framework of analysis for social capital



Source: Author (2011) based on Ostrom and Ahn's social capital theory (2003)

5.3.2 Research operationalisation

As already mentioned, the Fairtrade certification is related to local socio-economic conditions that have linkages with the social capital in the research region. To provide constructive implications for the establishment of a Fairtrade cooperative and determine the four structural factors, namely homogenous group, federation platform, delegates and external authority, there is a mix of explorative research methods to test a series of hypothetical questions in three fields.

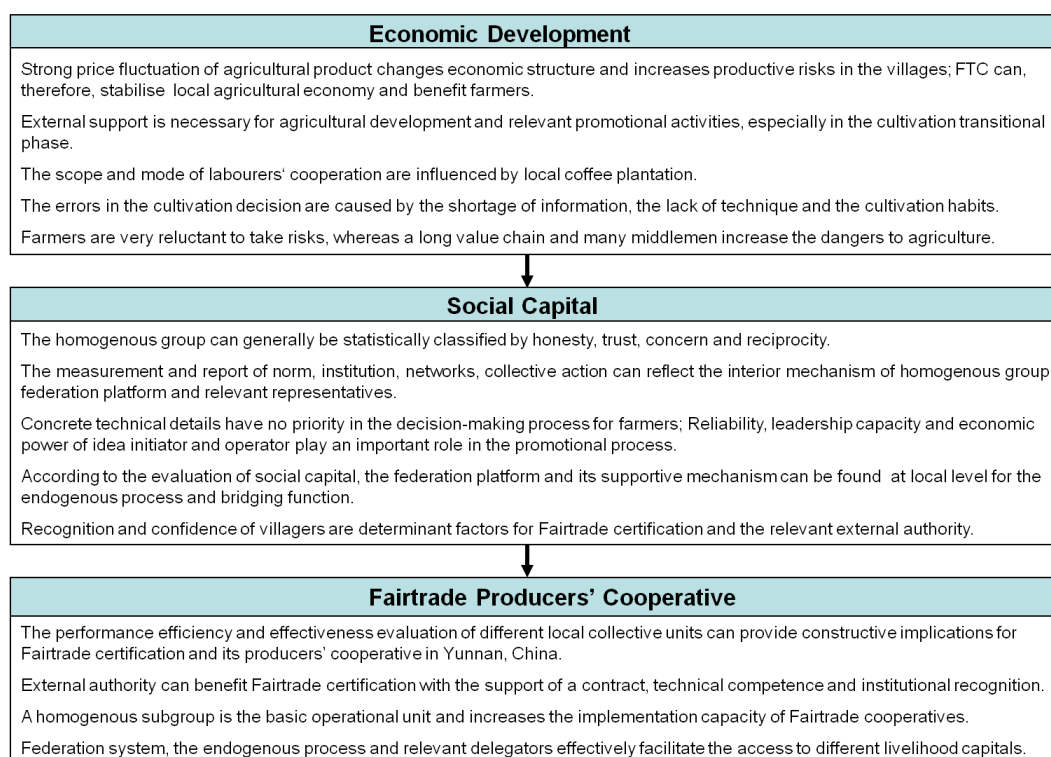
In the first field, the local natural environment, social circumstance and economic conditions are studied. These can influence the appearance, procedure and criteria of collective action in the village. The development of different social groups is also affected by socio-economic conditions. The geographic and climatic conditions, the allocation of forestry and cultivated lands, and related management are documented, followed by the socio-demographic description. Finally, the economic development and relevant labour usage are described. The socio-economic circumstances

affect villagers' cooperation mode, customs and relevant decision making. They also influence local norms, personal network and collective action. Based on these, local social capital is gradually developed.

The second research field is the study of the social capital in the MangGang natural village, which is linked to the "homogenous group", "federation platform", "representatives" and "external authority". According to Ostrom's theory, "homogenous group" can be the basic operational element, while the federated system is assumed to be a proper organisational model for a Fairtrade cooperative. The homogenous level of different local collective units can be statistically classified by the indicator of trust in terms of reciprocity, honesty and concern (relevant details are described later). To evaluate the performance of various collective units, the local norms, operational mechanisms, leaders, decision-making process, and relevant value system are clarified. The collective action is also observed to indicate the application scope, cooperation platform and operational unit for the possible federated system. Finally, the network of farmers and related organisations is studied to indicate the possible exterior factors. Foreign influences can change the cooperation conditions and platform within the village. Representatives, as boundary spanners, can possibly assist the necessary endogenous process, while an external authority with bridging function is important for Fairtrade certification at the local level. The report of various local organisations facilitates the identification of a potential external authority.

The third research field is to identify the "homogenous group", "federation platform", "representatives" and "external authority" by their corresponding features. The identification process is also a performance assessment of the various local collective units. The evaluation can provide beneficial implications and contribute to the Fairtrade certification for coffee production in the context of Yunnan. While the homogenous group tends to improve the operational efficiency of Fairtrade cooperatives, the external authority can provide additional and necessary resources for the success of the certification. Finally, constructive recommendations are presented for the organisational structure of the farmers' cooperative to access various livelihood resources (Figure 26).

Figure 266: The framework of hypothesis testing



Source: Author (2013)

The research aims to classify local levels, identify the group units and utilize original resources and regulations to benefit a Fairtrade cooperative. To confirm and verify the four structural factors, the social capital at the local level is studied from four perspectives of indicator bundles (Table 13). In the evaluation matrix table, the row represents the structural factors, while the column shows the indicator bundles. Within the matrix, there are features to identify the factors from the trust, networks, norms and collective action perspectives. On the evaluation matrix, the intersecting structure in the research is clearly presented. While the horizontal aspect focuses on the research input, the vertical aspect refers to the outcome of the study. Based on the intersecting structure, the research operationalisation system is developed.

Table 13: Evaluation matrix

Indicators Factors	Trust	Norms	Networks	Collective action
Homogenous group	Honesty, reciprocity, concern, acquaintance and reliability	Traditional sanction and reward, group rules and modes, power allocation, decision-making process, handling manners, gender condition, performance effectiveness and related influence and conflict resolution	Organisation's membership component, the participation rate, influence range, activity frequency, operational mechanism continuity, function and the direction, frequency, duration, age and reason of population movement	Group-organised activities, celebration modes, public service and related interdependence, solidarity, the willingness of cooperation and preferable form
Federation platform	Honesty, reciprocity, concern, acquaintance and reliability	Customs, development of shared rules, agreements with institutional responsibility, mechanism patterns, power distribution, performance effectiveness, gender value, decision making, political respect and conflict resolution	The direction, frequency, duration, age and reason of population movement: Organisation's membership component, the participation rate, influence range, activity frequency, operational mechanism continuity and function	Group-organised activities, celebration modes, public service and related interdependence, solidarity, the willingness of cooperation and preferable form
Representatives	High level of acquaintance, trust, reliability and honesty	The leadership capacity, prestige, the influence of opinions, traditional habits and cultural notion	Boundary spanners and linkage function	Operational competence, members' obedience and performance effectiveness
External authority	Long-term external recognition, competence confidence	Contracts with juristic obligation and institutional background	Bridging connection and structure holes	Arranged activities

Source: Author (2013)

The standards and context of indicator dimensions are similar for homogenous group and federation platform. However, their scope and levels are different. By means of statistics, different collective units are evaluated and classified. Later, the unit characteristics, relevant leaders and external factors are described and documented for the analysis of performance. To achieve widespread cooperation and facilitate Fairtrade certification, an external authority and its intervention are necessary. The external authority needs to obtain the essential recognition of villagers. All relevant local associations and institutions are studied to evaluate the compatibility and potential for the required external support. The entire observation of social capital is represented by the four indicator bundles: trust, norms, networks and collective action.

Indicators of trust: Trust is the central factor of cognitive social capital. It is related to personal relationships, information, communication and cooperation experience. The social distance between persons can reflect the intensity of their trust. Closeness enhances the level of trust, while a long radius causes the reduction of trust. Similarly, sufficient information benefits trust and helps the truster to make a decision. With timely communication, a trustworthy linkage can be expected to be built up. The history and experience of successful cooperation also facilitate the improvement of trust. The four above – mentioned factors are interrelated and reinforce each other. To better measure the level of trust, general and specific trust is first investigated (SCOTT, 1980: 811). According to the

secondary data from reports of a previous project and telephone interviews with local experts, the production group (natural village)¹¹ is focused on for information on the daily lives of farmers. As in EBERL and KABST's study (2010: 117), the first few questions are posed to reflect the moral and responsible action intention in the group from two perspectives:

- Farmers' broader attitudes of trust and beliefs that others will reciprocate beyond certain reasonable and concrete limits.

Here the questions represent the general relationships and circumstances among villagers. Respondents are asked questions about general trust in terms of relevant attitude, behaviour, expectations, processes and values. For example, what is their attitude? Is their reaction friendly or impatient? Do farmers expect mutual assistance? Do they act in a beneficial way even without clear agreement? Do they assess the values of acting generously?¹²

- Specific trust of different individuals, such as relatives, neighbours and friends, can be reflected when farmers need help and ask for support (SEIFERT 2001: 25). The incidence rate of specific helpers probably represents the level of closeness and the scale of the homogenous group.

Although people might exhibit trust among each other, it cannot be observed directly. In the question setting, hypothetical situations in the community are taken into consideration. A series of questions are illustrated, related to rural life and agricultural practices. Since specific trust is linked to specific persons in concrete contexts, the questions are formulated from two aspects, namely personal features and the appearance of support. Personal features are connected to ethnicity, religion, age and role, while the appearance of support can be divided into daily household, field work, babysitting and financial credit. The replies of the respondents are recorded and statistically analysed.

To further identify a homogenous group, trust is measured by the factors honesty, reciprocity and concern (OSTROM and AHN 2003: 51; PUTNAM 1995: 67). Reciprocity is usually considered as an important factor related to trust. There is always a time interval before the support of the other person arrives. Without trust, the interaction can only occur once.

¹¹ 'Production group' is an administrative definition, while 'natural village' is a geographic concept with clear physical borders. In Yunnan, these terms indicate the same collective unit. In the research, 'production group' is used in the fields of governance, power structure and norms. 'Natural village' is applied to the geographic description of location and distance.

¹² To facilitate the understanding of local farmers, different words and formulations were applied in the field survey to reflect the same indicators and relevant meaning.

Furthermore, trust can be created and reinforced through mutually beneficial actions. Honesty has a direct correlation with trust, especially in the context of the Chinese culture. If the person is not honest, he cannot be trusted. In China, honesty and trust are often used in combination. Similarly, concern has a close linkage with trust. If the person does not care about the truster, he cannot be trusted. Without concern about the relevant person, trust cannot emerge. Honesty, concern and reciprocity represent different effects and aspects of trust. There are position correlations among them. Since relevant questions about trust are focused on the classification, the statistical difference can be significantly identified by the KRUSKAL-WALLIS test.

- From the perspectives of reciprocity, honesty and concern, relevant strength, scope, intensity and procedure can show the differentiation of trust level in various collective groups. Based on the analysis of secondary data, three collective units are focused in the survey. They are family, production group and administrative village.

Each villager is asked to rank three collective units. Significant differences can possibly be found in all pair-wise comparisons among the three collective units from the perspectives of the three factors. The mean value comparison will also be done to present the differentiation among the three units. The survey on trust tries not only to capture the respondents' perceptions of general trust on the local level for the classification of homogenous group and federation platform, but also to determine the distribution of specific trust by the incidence rate of a person for the identification of the homogenous group.

Indicators of norms: Norms exist in various collective groups in daily life, and are based on local tradition and culture (HOFSTEDE 2001: 1). Different group members have various specific formal and informal roles, while there are explicit and implicit rules within the groups. In the analysis of trust, several collective units are distinguished. According to the classification of different local groups, norms are divided into various branches. The institutional regulation is the first branch, while the structural rule is the next. The administrative authority and juristic system offer the rights and power to the relevant mechanism and representative. Usually, the regulation is official and in writing. In contrast, the structural rule is more personal and established by usage. It is not designed, but has evolved in daily community life. No matter which method farmers apply, local social values provide support for the performance route. As a third unit, the value system is linked to just cultural notion and traditional habits, as well as to personal

evaluation, social status and relevant roles. In the three units, norms are further investigated based on the following items:

- Organisational mechanism

Based on collective land ownership and comprehensive socio-economic interaction, there is a governance system available for agricultural development. It has its specific process in terms of planning, presentation, discussion, promotion, performance and inspection. Each step has its purpose, accessibility, evaluation and importance. Finally, the outcomes of various community activities might be different. However, the organisational mechanism is the same and can be described comprehensively.

- Decision-making process and the obedience level of group members

The decision-making process has a close relationship with the organisational mechanism. It focuses on the performance and related effects, while the mechanism emphasises the structure and procedure. It is linked with different variables, such as personal function, mobilised resources, programming analysis and operational capacity. In each variable, the relevant influence, evaluation, management, scope and impact need to be taken into consideration.

- Gender condition and relevant traditional values

Gender condition and related social values are closely related to power allocation in groups. They are the foundation of the local institutional system. Farmers' perception decides on various social positions, personal expectations, educational levels, housework distribution and developmental potential of males and females. It is represented in inheritance and family division, which is directly related to family wealth and power allocation. It can also influence the handling manner of group members and their obedience level with respect to group decisions.

- Rules and their patterns

It is normal to find traditional rules within a community which are supplementary to those of the official institution. They are not contradictory to the constitution and laws, but have a specific and efficient contribution to public safety, security and well-being in a local society. Group rules can officially be announced and stated in writing, such as village management rules and forestry protection regulations. They can also be tacit and unwritten according to tradition and culture. Through the description of relevant rules, the emphasis of group activities can be recognised. The

major problems in daily life can also be defined. Furthermore, a brief history of the origin, performance and influence of group rules can provide detailed profiles for the organisational mechanism and decision-making process at the local level.

- Conflicts and conflict resolution

A crucial perspective of norms is linked to conflicts and the relevant resolution mechanism. It is necessary to mention the number, intensity, scope, theme, reason and persons involved in the conflict. On the other hand, it is important to describe the procedure, participants, judgement, compensation and constraint force of the resolution system.

In the analysis of norms, specific leaders and representatives of different collective units are also reflected. They participate in various activities and play an important role in carrying out the norms and related criterions. Leaders are necessary to be observed and identified in consideration of the follow four subsections:

- Personal reputation

The individuals have earned their prestige in previous community activities, while their personal history is a crucial factor to prove it. Many farmers have had experience of working with such persons. There is sufficient information to make a judgement. Their characters, attitude, behaviour and knowledge can also lead to respect.

- Personal status and roles

An individual's status can be decided by the political background, ancestry, administrative position and economic strength. He possibly has various roles in different events and practices. He may be a leader, representative, facilitator, operator or messenger. Various roles relate to various functions. Farmers' expectations can also reflect the actual role and position of specific persons. Furthermore, the exclusion or inclusion of different people in various events can facilitate the identification of a homogenous group that is beneficial to the access of local social capital.

- Leadership capacity

This often relates to specific experience, technical skill or personal relationship with local authority figures. Relevant personal temperament, as a leader or representative, can be represented by previous actions. Reactions, strategies, timing management, control capacity, judgement ability and balance skill need to be taken into consideration. This also correlates with farmers' acceptance and the influence of opinion. Based on appropriate

competence, leaders can convince other villagers and affect public affairs at the local level.

– Traditional habits and cultural notions.

These provide a reasonable and understandable foundation for the orientation of different persons in the local society. They consist of a series of information, such as age, gender, marital status, occupation, health and training. They also involve facts about type, structure and evaluation of different collective units.

Indicators of collective action: According to the specific research target and scale, the emphasis of analysis of collective action can differ according to corresponding factors and relevant impacts. In this research, the description of collective action intends to verify local organisational mechanisms and relevant key figures within the scope of a village. The community-organised activities are investigated, while the developmental tendency of collective action is studied. There are several items which assess the relevant activities, patterns and tendency:

– Public services

The availability and impact of services are evaluated: road construction, electricity installation, water supply and telephone line arrangement. The questions about effective provision are intended to reflect the local promotion system, performance process and basic operational units. A series of questions are posed to assess the level of solidarity within the community, which is the source of public service. Beyond the limitation of family or kin, ‘standing together’ within a larger group can achieve collective benefit. Different expectations regarding loyalty and conformity can be included in this subsection. To better understand the expectations and motivation of villagers, the questions are set in different scenarios of public services. Based on the replies of respondents, the cohesion level and the effectiveness of collective actions can gradually be defined.

– Festival assistance

Questions in this subsection are intended to elicit information about the criteria for altruistic behaviour. Certain factors are emphasised, namely the willingness, sacrifice, motivation, generosity consideration and relevant emotions. Furthermore, the description of different festivals demonstrates the scope of performance, the platform of operation, major organisers and relevant executors or participants to assess the local institutional system.

- Change in collective action pattern

Economic development changes the pattern of collective action. Different generations in the village probably have various ideas about the meaning of collective cooperation. Labour exchange is focused on to reflect the neighbourhood interdependence. It is investigated with the aid of questions about past experience, present practice and future expectations regarding mutual support. Important elements mentioned are the action intention, belief of favour return, cooperative willingness, preferable form of cooperation, developmental trend of labour usage and suggestions for cooperation. In addition, information on present thoughts and future expectations of cooperation are supplemented by questioning respondents about hypothetical situations, such as the double choice as follows (GROOTAERT and BESTELAER 2002):

- 1 hectare of land for one's own family only
- 2.5 hectares of land shared with another family

Although the second alternative offers more available land, farmers have to share ownership with other families. In contrast, in the first option they do not need to accept collective ownership. However, farmers obviously have less land to use. Since the selection of respondents often depends on the specific circumstances, further questions are posed to determine the reasons in the context of local institution and society.

Indicators of network: Network can be illustrated by different emphases based on the purpose of the research. In this study, it is used for the stability assessment of circumstances in the village. If farmers actively participate in labour migration or interregional activities, uncertain variables may be transferred from the outside to affect the local community. While the movement of population is concentrated on the actions of the individual, the description of local organisations is made from the group aspect. A well-connected organisation can play a crucial role in Fairtrade certification. It is necessary and beneficial to evaluate the internal features, social bond and capacity of relevant organisations.

- Movement of population

Economic development in the village improves the exchange of population and affects local society. Here, the study intends to depict the network structure, mechanisms and characteristics of social connection outside the research community. There are certain factors in the research, namely the activity scope, preferred location of migration, intensity of migration, length of time, age of the migrant and relevant reasons. These factors are

influenced by the local eco-social environment. The culture and traditions in the community also affect the intention, willingness, scale, context and features of people movement. The relevant description can reflect the homogeneous situation at the local level.

– Identification of local organisations

To determine the potential coordination and assistance institution for Fairtrade certification, both formal and informal organisations in the community are gauged in terms of type, membership component, purpose of establishment, history, distribution condition, influence range, accessibility by different members, involvement of different community groups, and extent of inclusion and exclusion. The vitality of organisations can also reflect the actual network in the village and provide constructive implications for Fairtrade, which can be investigated with reference to the participation rate, influence rate, frequency of activities, operational mechanism, origin and continuity, function of organisations and their external linkages (extent and nature of connections with national and international agencies).

In the homogenous group and federation platform, the standard and context of indicator dimensions are similar. However, their scope and levels are different. Through the analysis of trust, different local collective units can be classified for the general identification of homogenous group and federation platform. In the research on norms, the operational mechanism, power allocation and corresponding leaders in various units are reported on. Thereafter, the effect and function of local groups can be observed in the collective activities to provide implications for the establishment of a Fairtrade cooperative. In the end, the study on network can present the external influence and intervention in the stability of local collective units. The description of local organisation can probably contribute to the identification of the external authority and relevant support that are necessary for Fairtrade certification.

5.3.3 Methods of empirical analysis

In this study, a combination of different approaches was applied to obtain the necessary information. BaiHuaLing administrative village is selected from many local villages as the field-work region, because it is a typical example in Yunnan, which is the only Arabica coffee production province in China. This type of hillside village is frequently found in the mountainous areas of Yunnan (JIN Q. and LI W. 1992: 31). A high cultural

diversity in the village is also common in Yunnan, where there are 24 ethnic minorities.

Before fieldwork was conducted, secondary data were collected and analysed. The data set from a developing country is often incomplete due to different research goals and methods. However, with the data support of the international “Forest, Conservation and Community Development Project”, the research began with a stable base. By using Rapid Rural Appraisal (RRA) and Rapid Field Appraisal (RFA), which integrate participatory methods with a community survey instrument, the socio-economic situation was identified at the community level. Furthermore, several expert telephone-interviews were conducted with the cooperation of the local coffee institute. A general and basic framework of the local situation was identified.

Household survey: The questionnaire concentrates on the social capital in the villages. A major goal is the identification and clarification of a homogenous group. There are questions to assess trust, reciprocity, social concern, honesty and reliability levels in different collective units. Other questions are used to analyse social norms, collective action and participation level in local organisations. The census was undertaken in the MangGang, DaYuTang and BanWen natural villages. MangGang is the biggest natural village in the BaiHuaLin administrative village and the focal point of the research. Almost all adults in the village participated in the census. About 60 questionnaires were completed in DaYuTang and BanWen villages to compare with the results from MangGang village. About 250 questionnaires in total were completed in the three natural villages.

Focus group discussion: The focus was on the identification of leaders in the homogenous group. The literature review and questionnaire can probably provide implications. The clarification of the power allocation in the village and the operational mechanism in local NGOs can possibly contribute more information. Some discussions and group interviews were held with members of different community NGOs, such as the Seniors’ Association and Farmers’ Environmental Protection Association. The major topics were the typologies and common practices in different groups, such as activities, decision-making process, performance effectiveness and their influence. Other discussions were held in farmers’ homes on a range of issues. Most questions focused on the respect for social norms, celebration modes and the willingness of cooperation at household level.

Semi-structured interviews with key informants: Based on group discussions, important persons were identified as suitable for semi-structured interviews, such as the heads of two natural villages, the leader of the administrative village, the former Chairman of the Farmers' Environmental Protection Association, and heads of the Seniors' Association. Questions were asked about the performance of public services, movement of the population, and respect for rules. In order to obtain more macro-information on the agricultural policy and coffee industry, several interviews were conducted with persons at the provincial level. The most notable of these individuals are officers from the provincial Agricultural Ministry, the general secretary of the Yunnan coffee association and researchers at local coffee institutes.

Transect walks: Three transect walks with knowledgeable local people in the village were undertaken to observe villagers' social behaviour and to question them about coffee production. The responses to the survey were partially verified by observational techniques.

Data validation: There are always some biases in a survey, especially when the cultural background is not really clear. To identify the applicability and clarity of the questionnaires, an adaptive test was performed before beginning the large survey at the level of production groups. Based on the results of the test, several unsuitable questions were found and reformulated. However, some elders with a low educational level could still not understand the questions. Parts of the survey questions are probably too complex for them. To resolve this, it was necessary to speak slowly and to provide an explanation.

Social favourability is another challenge, together with technical reasons. Certain social topics are probably sensitive in the village. For example, respondents might not express their thoughts completely for consideration of their or others' dignity and respect. A survey conducted in a short period of time cannot resolve these concerns. Such problems can partially be buffered by technical arrangements, such as the question order and question repetition from different viewpoints. However, an in-depth interview is important. A length dialogue can relax a respondent and elicit the correct reply.

Data analysis: Using a mixed data source allows comparison of findings to validate or fine-tune the findings with each other. Although organisation-persons relationships and the interaction of individuals are complex and inconsistent, a rational selection of different methods and target persons can efficiently reflect the local situation from various aspects. This study uses

different information to validate the figures obtained from computing the survey data, and has ultimately used the findings to test the hypotheses. The household survey provides a general and intuitive impression, while a transect walk allows the researcher to observe farmers and their village. Based on the results obtained by focus group discussions, several important persons can be identified. Later, semi-structured interviews are conducted with these persons to collect more specific and precise information. Statistical software for social science (SPSS) was used to compute aggregate measurements such as to create indices and carry the descriptive conclusions used for comparing social capital indicators in the village. Field notes from on-site observations and transcribed interviews were also summarised and used as explanations for purposes where they were deemed necessary. Although the research is focused on a single agricultural product and conducted in several villages, similar social, natural and economic situations can be found throughout the mountainous provinces of Western China. The establishment of a Fairtrade cooperative can possibly have a certain contribution to and significance for the promotion of Fairtrade certification and relevant rural development.

6. Resource and development in the research villages

Fairtrade aims to help poor, marginal farmers and their communities to achieve sustainable development (FAIRTRADE FOUNDATION 2009; 2010: 1). The research villages are located on the national boundary line between Myanmar and China. They are directly next to a natural reserve, which is part of the UNESCO World Heritage. The border situation attracts less attention of the government and hampers infrastructure construction. Although its coffee has the quality potential to enter the speciality market, farmers obtain little residual value from the coffee industry and have been marginalized in an oligopolistic local coffee market. To enhance their income, farmers search for quantity through the expansion of the cultivation area and conventional production intensification. Consequently, environmental protection is critically stressed, especially in the buffering zones. In this chapter, all characteristics and their related aspects are synthetically introduced to benefit the Fairtrade certification.

6.1 The natural situation

6.1.1 Research region

Manggang natural village officially belongs to Baihualing administrative village, like DaYuTan and BanWen. It is the biggest natural village and directly next to GaoLiGong Mountain in Yunnan, south-west China, bordering Myanmar to the west, Tibet to the north and Nujiang River (Salween River) to the east. The famous Nujiang valley is formed by GaoLiGong Mountain and Nu Mountain. The total area of the valley is 514,022 hectares (YUNNAN MANAGEMENT BUREAU 2011). It is a part of the Three Parallel Rivers of Yunnan Protected Areas, beyond the eastern end of the Himalayas. In 2000, GaoLiGong Mountain was recognized as a Biosphere Reserve under the UNESCO Man and Biosphere Programme. In 2003, it was included in the World Heritage List.

Over the last 30 million years, the Indian plate has been pushing northwards under the Eurasian plate. On the edge, between India and Tibet, the rocks have been raised 8 kms above the sea level, creating the world's highest mountain range, the Himalayas. But to the east, the rocks have buckled into a series of steep north-south ridges, the parallel Hengduan Mountains (Figure 27). GaoLiGong Mountain is one of them. It stretches out for over 600 kms. The north part is much higher than the south part. The highest point in the north is 5,128 m in comparison with the lowest point of 210 m

in the south. The average altitudes of the south and north are 800-1,000 m and 2,500-3,000m, respectively. Owing to its range of elevations, its location on the boundaries of three major bio-geographical realms, i.e., East Asia, south-eastern Asia and the Tibetan plateau and as an ecological corridor between north and south, it contains most of the Palaearctic temperate biomes from alpine to southern sub-tropical (UNEP and WCMC 2011).

GaoLiGong Mountain is a traditional agricultural region with primary industry as the main economic activity. An estimated 1.7 million people live in the area in 16 ethnic groups, e.g., Lisu, Han, Yi, Tibetan, etc. The income of the villagers is mainly from crop farming and livestock breeding. Rice, maize, barley, rapeseed, cassava and peas are the major agricultural crops. Cash crops, such as sugar cane, coffee, walnuts, chestnuts, tropical fruits and tobacco can be planted in the low altitude areas. Above 2,400 m, the development of settlements is limited by persistent foggy weather in the growing season. Chickens, pigs, cattle, ducks, and other poultry are bred for own use and sale. In addition, restaurants, transportation, brick firing, lime, rice processing, construction, running convenience shops and personal services can also bring extra income for some farmers.

Figure 27: Location of Yunnan and research region



Source: Author Illustration based on Google Earth (2012)

6.1.2 Land use in research village

Manggang village is one of the biggest natural villages in Baihualing administrative village (Figure 28), which belongs to Baoshan region in Yunnan, and has 2200 inhabitants in Baihualing administrative village. The

total area is 18.6 square kilometres. There are nine natural villages¹³ that are distributed throughout the landscape. The Manggang and Chunjia rivers run along its north and south borders. The west side borders on a nature reservation area in GaoLiGong Mountain. Mailishan natural village is in the east, 9 km from a state road. It is a hillside village, where the western part is higher than the eastern. The highest point is the boundary between the nature reservation and the collective forestland at approximately 2100 meters, while the lowest is the wet land at approximately 1010 meters. The altitude difference is 1090 meters. The relative physical isolation imposed on Baihualing administrative village by the encircling mountains results in a favourable climate, where the differences between summer and winter temperatures are smaller than in other regions. Temperatures can reach 32°C in summer and drop to 8°C in winter, and the annual average temperature is 24°C. Except for the highest part of the mountain, it is frost-free all year round. The year is divided into dry and wet seasons. The dry season is from October to March, and from April to September is the rainy season. January, February and March are the driest months of the year. The highest rainfall is normally in June, July and August.

Manggang village covers 207 hectares. It includes 127 hectares of cultivated land and 80 hectares of forest. In 1981, the rights to use the cultivated land were distributed among each household. Related title deeds for land were also correspondingly regulated and obtained by each family. The tenure of land contract was 15 years. In 1996, the tenure was extended for another 30 years according to relevant policies. Each villager in Manggang village has on average 0.31 hectares of cultivated land. This is three times more than the overall average in Yunnan (0.1 hectares) and in China (0.094 hectares) (DEPARTMENT OF LAND RESOURCES OF YUNNAN PROVINCE 2005; MINISTRY OF LAND AND RESOURCES OF THE PEOPLE'S REPUBLIC OF CHINA 2005).

¹³ In the Chinese administrative system, a township is the basic administrative unit. A township consists of several administrative villages. In an administrative village there are some agricultural production groups. A natural village is not an administrative village. A big natural village can include a few agricultural production groups. It is also possible that several natural villages combine into one group. The administrative structure in each province is different. In Yunnan, a natural village is usually an agricultural production group. In the case of Baihualin administrative village, only two small natural villages form a group. For another seven natural villages, each village is a production group, including Manggang village.

Figure 28: *Location and view of research villages*



Source: Google Earth (2012) and Author (2010)

Since 1978, the Household Responsibility Policy has been gradually performed in whole China. While the collective nature of rural land ownership was not changed, use rights were fixed in binding household-based contracts. The land distribution was fairly divided according to different planting specifications like location, soil fertility and irrigation conditions. Every family was granted a small piece of land in each category. Therefore, it is normal for a family to have nearly eight dispersed pieces of land (HE, X. 2010: 4). Since 1982, the collective land has been distributed and is rented by each household in the village. National policy and regional performance plan were delivered to the administrative village and confirmed in the production group. While the national policy and regional program provide a legal basis for the land distribution, the perception and implementation, generated from the local situation, strengthen its stability and continuity. With the assistance of the village chief, production group leaders, villager representatives and members of the communist party, the administrative decision has been smoothly applied¹⁴. Farmers are happy to manage their own land, although the collective feature of the land has not changed. Almost all kinds of land are included, except parts of the forest land kept by the natural village as collective forest land. After discussions about distribution, each collective member in the production group obtains a part of the collective land that is evenly allocated and guaranteed by contract (Table 14). Some farmers were not completely satisfied about the

¹⁴ There is an organizational mechanism to enhance performance, which will be introduced in the next chapter.

distribution. Through house visits and communication with village representatives and group leaders, they finally accepted the collective decision and signed their names on the contract. The land-use decision is independently made by each family, although the ownership is officially occupied by the production group (STANDING COMMITTEE OF NATIONAL PEOPLE'S CONGRESS 2002). Furthermore, each household obtains a small piece of yard land, which is in front of or behind their house. The area is from 0.0067 to 0.013 hectares.

Table 14: Statistical data on collective lands

	Cultivated Land Area (hectares)		Forest Land (hectares)	Total (hectares)
	Wet Land	Dry Land		
Village	28	99	80	207
Per Household	0.27	0.95	0.77	1.99
Per capita	0.07	0.24	0.19	0.50

Source: Author (2011)

The large distances between the distributed lands from each household increase cultivation and management difficulties. The distance between two pieces of land can even be more than 6 kilometres. In the interviews, farmers complained about the dilemma: not only time and energy are wasted but costs of transportation and farming are increased. The construction of a comprehensive irrigation system is also difficult. The cultivated land with an irrigation system is called “wet land”. Since the wet land is directly located along rivers with shallow slopes, the water channels are easily built and managed. Each household has established its own irrigation system in the wet land. The water supply is plentiful. Even in the dry season, rivers still offer enough water for the wet land. The irrigation system can benefit 28 hectares, which is 22.3% of the whole cultivated land. The remaining 77.7% land is dry land, where the slopes are between 15 and 45 degrees. The only irrigation source for dry land is rainwater. Based on the specific physical conditions, an irrigation system managed by households is almost impossible in this area. To achieve efficient production and net benefit, a collective action on a large scale is necessary and important. The proposal of irrigation cooperation was presented in the production group meeting. Although farmers realized the weakness and dilemma of individuals, they were hesitant to agree to the proposal. Besides the high financial and labour investment, they were afraid their land would be taken away in the name of collective cooperation. The experience of previous commune farms is still present in the household leaders. Without

external support, it will be difficult to further promote the idea of irrigation cooperation. There is no relevant collective action or association to date. However, the potential benefit for collective action is obvious. With an irrigation system, the productivity in the dry land could be greatly increased. The risks caused by drought would also be significantly reduced.

External intervention is important and necessary for the management of major livelihood capital. The well-preserved collective forest is a typical example. Although the cooperation regarding cultivated land has failed, the reform of forestry governance is performed on the platform of production group with the assistance of an international agro-forestry project. Relevant achievements were praised and documented in the reports of the Forest Conservation and Community Development Project (FCCD). This was a large agro-forestry project between the Dutch Wageningen University and Yunnan forest bureau. The Baoshan coffee research institute, management department of the GaoLiGong Mountain Preservation Park, and the local government participated in the project and were responsible for the formulation of rapid forest appraisal. There are two parts of collective forest in the production groups. In 1986, the use rights were distributed to each household and immediately caused large-scale timber logging. The results of the appraisal showed that unified management is necessary for sustainable preservation and development of the forest. With the financial and technical aid of the agro-forestry project, the head of the administrative village introduced a collective and unified management for the maximum benefit of all villagers. The resistance was strong. Many farmers did not want to return the land they had, although the owner rights belonged to the production group. The village head talked with friends who had influence in the village. Then they communicated with other authority figures. After private discussions in a village, an initial proposal was created and presented in the village meeting. A broader discussion was started among the villagers. While the final decision was individually made in each family, the group meeting was the important occasion for the confirmation of the proposal. Members of the communist party, group representatives and members of the village committee expressed their approval and presented the facts to convince the others. As the sub-programs of the FCCD, the agricultural development plan, training service and bio-energy construction were also announced in the meeting to increase villagers' motivation. With their support, the final decision was confirmed in the group meeting with signatures of most household heads. The few opponents received house visits for further communication. In the end, all villagers signed the agreement. The new management system is applied in the scope of the

administrative village. One part is for firewood, while the other is reserved for building purposes. The related promotion process and specific management details will be described in the next chapter. Based on the external facilitation of the agro-forestry project, the group-based collective action seems to achieve certain success.

Success is not easily achieved due to the application of intensive agricultural and the structural change of cultivated varieties. In the last 15 years, cash crops have generally replaced grain crops. Since the area of cultivation land is fixed in MangGang village, especially for the wet land, the pressure on land use has increased. Sufficient water supply in the wet land yields high crop production. Farmers treasure the wet land usage. Rice is no longer the popular choice, and has been replaced by cash crops. In 1997, the majority of wet land was used for planting hybrid rice, about 16 hectares. Rice productivity was on average 1.2 tons per hectare (FCCD PROJECT REPORT 2006: 97). Only 15 families did not grow hybrid rice but bought it from their neighbours. Although rice is the staple food and some families did not plant rice, there was still a sufficient supply. About 50% of the families in the village sold their additional rice harvest to outside markets. Maize is also planted in the village but is not a major crop. Most of it is used to feed livestock and poultry, especially pigs. Coffee has become a dominant crop (table 15). Later, the specific development of cash crops will be further described.

Table 15: The usage of cultivated land

Wet Land	1997		2009	
Major Crops	1	2	1	2
	Rice	Sugar Cane	Coffee	Citrus
Others	Tobacco, Citrus, Coffee, Potato, Maize and Wheat		Sugar Cane	
Dry Land	1997		2009	
Major Crops	1	2	1	2
	Sugar Cane	Maize	Coffee	Sugar Cane
Others	Coffee, Walnut		Maize, Walnut, Chestnut	

Source: Author (2011)

6.2 Socio-demographic figures

Manggang natural village was established about 200 years ago. It started with only 3-5 families, and the village population grew very slowly. In

1945, there were 9 families with a population of about 50. Most of them came from LanPing County. In 1962, more than 10 households moved in from nearby counties and villages. Now, there are 104 families and a total population of 415. In the last forty years, there has been almost no migration. The community has remained stable. The average number of people in each family is four. Due to the current family policy in the rural areas of Yunnan, each household is allowed to have two children (NATIONAL ETHNIC MANAGEMENT COMMITTEE 2001). When the young people marry and have children, the family is enlarged for a short period. However, complicated interaction among family members will cause the family to divide. Finally, family size will return to four again, namely husband, wife and two children. The wealth gap is not big in the village, although there are several poor households. Some family members are disabled, drug addicts or seriously ill. Relevant costs are high and limit development potential. Generally those are individual cases.

The village is ethnically mixed and has a population of Han, Lisu, Yi and Bai. There is no big clan or ethnic group which controls the common activities in the village. There are 19 family names. Mi, Li, Liu and Gao are the most popular ones. Lisu and part of the Han are Christians. There are over 40 Christians in the village. The rules are strict, while they abide by them well. They do not drink alcohol or smoke cigarettes. On Sunday, they only eat vegetarian food and do not work. The pastor in the village inspects their activities and has a large influence on them. Relevant religious regulations have been released in the last decades, which have become common sense and respected by Christians and other villagers, though some non-Christians cannot understand the meaning of them. There is no conflict between the different religious groups. Christians can freely marry non-Christians. But the wedding cannot be held in a church. The whole process is confirmed after discussion between both families (PROJECT EVALUATION REPORT 2004: 226).

The other Han Chinese believe in Confucius. In their houses, a small family shrine with several tables, each representing "Heaven, Earth, Nation, Parents, Teachers", is the focal point of the living room (Figure 29). Due to the highly mixed member component, there is no big family clan in the production group. Intermarriage between two ethnic groups is very common. There is no specific conflict between different ethnic groups (PROJECT EVALUATION REPORT 2004: 223). The socio-demographic factors seem to have no significant influence on the agricultural development and related land utilization in the production group.

Figure 29: *Living room of Confucius family and Christian family*



Source: Author (2009)

6.3 Agricultural development

Since 1978, economic reform has gradually been introduced into the whole of China. The ideological conflict during the Cultural Revolution has been replaced by economic development. Like other villagers, farmers in Manggang try to increase their income and achieve an optimal balance between agricultural trade, farming practices, labour allocation and collective cooperation.

6.3.1 Vegetable production

Agriculture is the major income source for the families. The influence of marketing has become stronger and directly reflects farming methods. Cash crops have increased over the past ten years. The selection of cash crop varieties embodies the development trend and its characteristics. Besides natural conditions, cultivation techniques and economic capacity, the unstable price of agricultural products, the shortage of market information on supply, the desire for maximum profitability and the hesitation to take agricultural risks comprehensively influence farmers' agricultural decisions and related activities.

6.3.1.1 Tobacco

Development history

Tobacco is a popular cash crop in Yunnan. It has a higher economic value compared to cereals. The income of tobacco farmers is twice that of rice farmers. The advantages of tobacco cultivation encouraged the regional government to introduce this crop into the BaoShan region for local agricultural development. The promotion of tobacco plantations in the

region started in 1987. The related decision was made in the regional government meeting and affirmed by the head of government and the chief secretary of the Communist Party. It was an administrative order and announced in the governmental documents that were directly released to each administrative village. A local state-owned national tobacco processing factory was built with the financial support of the regional government in 1988 (*Baoshan News* 2009). However, the plantation area was limited to 3333 hectares after four years of development. A meeting was called to promote the development of the tobacco plantations. All the involved heads of towns and administrative villages participated. Two development barriers were concluded, namely the hesitation of local leaders (village level and production group level) and the shortage of technical assistance. To solve the resistance towards tobacco cultivation, the promotion was increased to demonstrate the willingness of the regional government. To promote the tobacco economics, in 1990 about one hundred governors had short and intensive training courses on tobacco cultivation and post-harvest process. In the following year, they were distributed to 50 towns to increase promotion of the tobacco plantation policy (*Baoshan News* 2009). The leaders of production groups, communist party members and group representatives joined the village meeting. The leaders of the administrative village informed them of the decision on the development plan for tobacco cultivation and showed governmental documents, while the governors were responsible for technical assistance, performance inspections and achievement reports while the heads of the production group were responsible for operation. All members of the Communist Party had to accept the decision and played a pilot role in the promotion process. Basic indexes were defined, such as plantation area, to assess the level of performance for each administrative village and production group. Village leaders had to monitor the operational process, assess the results and report to the town government at the end of the year. To further support the tobacco plantations, seedlings were provided by the town government as a form of credit. In the harvest season, a state-owned tobacco company bought all products without the consideration of quality (*Baoshan News* 2009). With the dominant power of the administrative system, the policy was rapidly transmitted. In 1997, the tobacco area reached about 35,600 hectares, although the sustainability of development is doubtful.

The dilemma of development

Due to the poor road conditions, the promotion process started late in the village. In 1996, the village heads encouraged and persuaded local farmers to plant tobacco. In the first year, tobacco was planted on 0.67 hectares with a 166% net profit margin (FCCD PROJECT REPORT 2006: 94). The small plantation area reflects the operational difficulties. Excluding the psychological reasons of the farmers who were not accustomed to growing tobacco, the physical factors greatly contributed to their planting decision making. Tobacco can only be planted in the wet land, which is only a small part of the cultivated land around the village. Furthermore, there was no cigarette processing factory in the area. All tobacco leaves had to be transported to the only factory in Baoshan region to be processed. Therefore, farmers had to dry the leaves themselves before these could be transported, which increased production costs and related risks.

Tobacco cultivation does not require a large space, so it is less competitive in land use than other crops. However, the harvest seasons of tobacco and sugar cane overlap. Because of the labour shortage, there was no labour to harvest both at the same time. Some tobacco leaves were left in the field and rotted crops, which led to economic losses for the farmers. Furthermore, the relatively high technical demand required for cultivation and processing are challenging for many villagers. No local research institute could offer training service. The farmers suffered additional losses because they did not have the knowledge and skills to produce good crops.

In 1997, there were 19 hectares of tobacco plantations in the village, which led to a total revenue of 256,500 Euro. Some farmers could earn 4,500 Euro, while the plantation cost was 850 Euro per hectare. The optimal net benefit per hectare reached 3,650 Euro. But on average, revenue per hectare is 1,350 Euro, while the plantation cost takes 450 Euro. The net benefit was 900 Euro per hectare in the administrative village (FCCD PROJECT REPORT 2006: 98). The difference in net benefit was about 4 times between optimal and average price levels. High investment costs and risk of lower returns limited villagers' motivation to move forward. A similar situation was also found in other villages in Baoshan. On the other hand, the buying guarantee caused a large financial loss for the state-owned tobacco company. Due to the unsatisfactory quality and limited marketing channels, the sale proceeds were low. Until 1997, there were 15,000 tons of tobacco leaves in the storehouse that had cost 40 million Euro (*Baoshan Daily* 2010). In 1997, the annual revenue was less than 40 million Euros in Baoshan region

(*Baoshan News* 2009). It was difficult for the local government to continue to support the relevant companies.

In 1998, the state council released a policy to control the plantation area and limit the buying amount of tobacco leaves (STATE COUNCIL 1998). To improve the quality and reduce relevant agricultural risks, the areas were not included in the regional development plan, which were not optimal for tobacco plantations. There is no longer a buying guarantee. A contract system was introduced, while the price was related to the quality of the product. In Baihualing village, there was no administration order or mandatory index to arrange agricultural development. Farmers can make their own decisions and take relevant responsibilities. Due to the high risk in tobacco plantations, these were gradually replaced by sugar cane cultivation, which has a higher rate of success.

Although the promotion of tobacco plantation has failed, the organizational system presented constructive implications that can be interesting for Fairtrade certification. The orders were directly allocated in each administrative village, while the trained governors regularly visited the village to facilitate the plantation development. The buying guarantee could efficiently motivate villagers and reduce their unwillingness. With the consideration of quality and market economics, the protective price arrangement of Fairtrade certification could also convince local farmers.

6.3.1.2 Sugar Cane

Development history

Sugar cane has been a traditional cash crop in Baoshan region for over 60 years. Since 1949, when the communist party took power on the Chinese mainland, it encouraged the Yunnan farmers to plant sugar cane to achieve self-supply and export to the former Soviet Union. The cultivation area in 1997 was 33 hectares. In 1998, the harvest was 1,800 tons in the whole administrative village and provided more than 20,000 Euro income to the villagers (FCCD PROJECT REPORT 2006: 97). Although the economical value of sugar cane is slightly lower than that of tobacco, the production techniques are less challenging. After 60 years of experiences, most farmers master the basic cultivation skills. There is a local sugar factory to solve the barrier of market entry, which is convenient for the farmers. The factory was a stated-owned economic entity before 1986. Then the ownership of factory was changed, as a part of the economic reforms in Baoshan region. According to the decisions of the state council, the government needs to gradually rid itself of its function of enterprise management (*People Press*

2008). With the consideration of stable and independent management capacity, a former manager in the factory became the owner. Funding was solved by a bank credit, as a shareholding system did not exist. Today, it belongs to a private sugar company and has a long-term cooperation with local farmers. After harvest, sugar cane is directly transported and sold to the factory. There is almost no post-harvest process work for villagers. The compound fertilizer can be bought in local shops. There is no large income differentiation among the households. The operational risk is lower than tobacco's for the villagers. They thus preferred sugar cane planting even during the time when the government promoted tobacco. When in 1998 the buying guarantee of tobacco was cancelled, sugar cane became popular in the village. Its plantation area was further expanded. Most of the wet land is currently utilized for this purpose. Since sugar cane can be planted in both wet and dry lands, only in 1998 about 13 hectares dry land was allocated to sugar cane. The growth rate in sugar cane cultivation area reached around 40% of cultivated land (FCCD PROJECT REPORT 2006: 98).

The dilemma of development

Sugar cane productivity varies in different kinds of land. In wet land, the average yield can reach 90 tons per hectare, while it is only 50% of that amount in dry land. Due to the nearby nature reserve, the river water can supply the irrigation needs in wet land. However, plantations on dry land depend completely on rainfall. Because sugar cane has a high soil humidity demand, climatic factors have a strong influence on productivity. For instance, the average yield reduced from 54,3 tons per hectare to 45,75 tons per hectare due to a drought in 2005 (HUANG and BAI 2008: 50). The loss ratio was about 15,7% in one year. In 2007 and 2010, droughts occurred again and took a heavy toll. The uncertainty caused by weather has an obvious negative effect on cultivation. In 2007, the Baoshan government released a price protection policy (YUNNAN BAOSHAN GOVERNMENT 2007). Each ton of sugar cane had a buying price of 20 Euro without the consideration of quality. Sugar companies could bid a higher offer according to their individual situation, but not a lower one. Although this was just practised for one year, the generous buying prices efficiently mobilized local farmers. On the other hand, local sugar factory preferred to introduce a contract price system to stabilize the situation. Before the start of cultivation, the price, based on different quality classes, was regulated and fixed in the contract. To encourage farmers, the sugar factory gave participants a cultivation subsidy of 450 Euro per hectare. Each household

can get two bags of compound fertilizer for free (*China Business Newspaper* 2010).

The sale price of sugar cane increased slightly in the following years. In 2007, the price for the first quality class was 21 Euro per ton, while the price reached 24 Euro in 2008 and 28,4 Euro in 2009. In 2010, it reached as much as 34,4 Euro per ton (BAOSHAN INDUSTRY AND INFORMATION COMMITTEE 2011; HUANG and BAI 2008: 51). This helps the farmers to maintain their plantation to some extent. However, cultivation costs have simultaneously increased, especially the labour costs. Sugar cane harvest is heavy physical work. Over a short time, tons of sugar cane have to be harvested and transported in trucks, and calls for strong male labourers, although others can participate. The leaves of sugar cane are sharp as knives, and can easily cause wounds in the face, hands and arms of harvest workers. Therefore, it is not a favourite job for many farmers. In 2006, harvest costs were 3-4 Euro per ton, while in 2009 harvest labour cost were 6-8 Euro per ton and reached 8-10 Euro per ton in 2010 (BAOSHAN INDUSTRY AND INFORMATION COMMITTEE 2011). In the harvest season, the labour demand is high. Related time conflict increases the pressure on labour demand, especially in the harvest period (LI 2011: 82). Thus, from 2006 to 2010, labour costs increased by about 257%, while relevant sale prices did not rise at a similar rate. The benefit ratio actually sank. Slowly, farmers began to consider other possibilities for agricultural development. Since 2004, the sugar cane trend started to reverse due to the price competition of coffee. The plantation area was gradually reduced. In 2009, the local sugar factory partially stopped production because of insufficient sugar cane supply (*China Business Newspaper* 2010). The owner decided to just run one production line to reduce auxiliary costs. The high level of fix costs and loss possibility lasted for a long time. Farmers wanted to have a change to improve their livelihoods. Coffee has now become the most popular cash crop in the village.

6.3.1.3 Coffee

Development history

Now Manggang is a classic coffee village. Since 1997, coffee has been planted in the MangGang production group. It was the idea of the group leader. In the beginning, only a few families agreed and participated. In that year, 2.7 hectares of wet land were used for coffee plantations. However, 53.3 hectares land in 1999, including 20 hectares of wet land and 33.3 hectares of dry land, were cultivated (FCCD PROJECT REPORT 2006: 97-98).

Since the coffee tree usually bears fruits after the third year, the rapid expansion speed proves the high level of promotion efficiency in the production group. About 40% of cultivated lands were converted into coffee plantations in three years. In the report of the FCCD PROJECT (2006: 112), the external support was clearly documented. In 1998, the project paid 80% seedling costs for longan intercropping on the plantations. In return, farmers invested labour, fertilizers, time and 20% financial capital. It is not a simple aid activity, but part of a comprehensive development strategy. At the beginning, rapid rural appraisal and rapid forest appraisal were done with the assistance of project staff. Based on the results and village-wide discussions, a community development plan was drawn up to reduce the pressure on the nearby nature reserve and its wild animals. Relevant difficulties were concluded, such as the lack of money for economic development, the shortage of forest seedlings for deforestation, the deficiency of infrastructure for ecological tourism, and the scarcity of technical training. Coffee and longan intercropping, as one of the solutions, was funded. Besides the intercropping system, walnut plantations, construction of a village square, training courses and biogas tank installation were financially supported. A project committee was organized to monitor the project performance. There were eight members, including one administrative village head, two production group leaders, three village representatives, an employee from the nature reserve, and a technician from a forestry station (FCCD PROJECT REPORT 2006: 116). The village head was in charge of the whole group, while the technician was responsible for the training courses. In 2005, a project assessment was made to evaluate the results. The project was a pilot effect on coffee plantations. Coffee and walnut plantations achieved success, while the growth of longan was not satisfying. The mortality rate of longan trees was between 50% and 80%. The intensive agriculture caused strong space and nutrition competition among the longan and coffee trees. In each hectare there were over 6,000 coffee trees, while the average value is generally 5,000 trees per hectare in many countries (CLAY 2004: 76). To achieve high coffee productivity, farmers stopped replanting longan. The intercropping system slowly became a coffee monoculture. This is a common situation in Yunnan. The intensive cultivation causes high pressure on nutrition supply. Despite the high productivity during the first years, the yield per tree eventually declines (MASABA 2000). The high tree density hampers the ventilation in the field and facilitates the spread of coffee rust disease. On the other hand, the high density provides self-shade and prevents the invasion of coffee tree borers. While borers can cause the death of coffee trees, coffee rust disease

is not a fatal infection, but hinders the photosynthesis process. Compared with the loss of quality and rusted leaves, dead coffee trees and low yield directly affects farmers. Without considering crop quality, farmers simply search for yield increase with the necessary fertilizer application.

Besides the contribution of the development project, coffee market prices played an important role in the promotion process. From 2002 to 2011, the coffee price rose continually. While the Yunnan market price in 2002 was 0.77 Euro per kilo, in 2011 it reached 4.1 Euro (*Kunming Daily* 2012). This greatly motivated the farmers. The transformation process was performed gradually. The land was divided into at least three parts, since coffee trees need three years to bear fruit. In the process, all unnecessary expenses are reduced. Each year there is income from untransformed lands. With the capital saved in previous years, the farmers can maintain a basic livelihood in the transformation period. For some households, credits are still necessary, since farming costs are quite high and consist of the expenses in chemical fertilizers, pesticides, farm implements and seedlings. Therefore, the credit available to farmers has an important impact on their agricultural farming. There are two ways to obtain credits. Officially, farmers can apply for money at an agricultural bank or related credit associations. For the past 15 years, there has been a government-owned credit association in the town. However, villagers do not like to apply for credits when they need money. Collateral requirement, interest and no nearby credit association are typical barriers. Villagers normally use private channels to borrow money, and can usually raise money among friends and relatives. No collateral or interest is required. Farmers prefer to solve their financial problems this way. The whole transformation process takes at least 5 years. In 2009, over 70% of the cultivated land in MangGang was used for coffee plantations. Coffee became the main cash crop in the village. Other crop varieties are reduced (Table 2).

The economic value of agricultural products is one of the criteria for farmers when selecting varieties. Yunnan is not an industrial province. Even in the province capital, about 600 kms from Baoshan region, there are only few manufacturing opportunities. The household income depends on local agricultural development. Most people are engaged in farming and do not work as migrant labourers. To increase their income, farmers prefer to plant cash crops with higher benefits. Since rice has less economic contribution, almost none of the households cultivate hybrid rice any more. Rice is purchased from outside, and has a much lower economic value than coffee. The whole village economy depends on coffee plantations. The strategy change among different cash crops did not happen accidentally. Coffee had

a better economical value ratio compared to tobacco and sugar cane in 2009. In 2010 and 2011, the ratio was even higher, since the coffee sale price was raised about twice. Although the related cultivation input simultaneously increased, especially the labour costs, farmers were very keen on coffee plantations. The contribution of coffee is significant for the overall local economy. Because of the high value of coffee beans, farmers' incomes have increased. The average per capita income in the production group is almost 200% higher than the average per capita regional income of 446 Euro per year (MINISTRY OF COMMERCE OF CHINA, 2012).

Nowadays, farmers have the capacity for not only coffee seedling and cultivation but also for the post-harvest process. Before selling their coffee, farmers go through a 3-steps process, namely pulping, fermentation and drying. For pulping, a drum pulper is used, which is a machine with a breast plate and a rotating drum. During the pulping process it needs water. Red ripe cherries mixed with water are piped into the pulper. Coffee cherries pass down between the breast plate and the rotating drum. Coffee beans are separated from the peelings and collected in plastic bags. The next step is fermentation (washing). Freshly pulped beans without skins and unpulped berries are put in a clay jar filled with enough water to break down the thick mucilage layer on the parchment into simple non-sticky substances, which can be easily washed off. In the final step, the coffee beans are spread out on a concrete floor and dry in the sun. The excess water in the parchment evaporates rapidly. The coffee beans are stirred several times a day to ensure consistent drying. At night they are protected by a cover from humidity through rain and dew. Besides water, sunlight and manpower, there is almost no other production input in the post harvest process. Since the work is not intensive, family members can finish it by themselves. To further save time and labour, machines are applied for pulping. Most of households in the village use their own pulpers, which are made in BaoShan. It is not expensive and usually costs 80 or 90 Euro. There are repair shops in town. The parts and accessories can be easily replaced. Common problems can even be fixed inside the village (Figure 30). Complete technical service and material supply, such as fertilizers and pesticides, can be found locally.

Figure 30: Coffee bean drying and pulper repairing



Source: Author (2010)

The coffee sale transaction is also convenient for the farmers. Coffee middlemen come to the village after the harvest season. Most of them are local and are familiar with harvest timing. The small village square in Manggang village is temporarily used as a trading place (Figure 31). The coffee beans are packed in nylon bags and weighed. According to price by weight, farmers are paid in cash during the transaction. There is no quality control at the site, although coffee beans will be resold to another intermediary or sold directly to instant coffee companies. The trade process is simple and fast due to the good reputation of the Manggang coffee quality and the mutual trust between sellers and buyers. This good business relationship has been established over a long time.

Figure 31: Coffee sale in the village

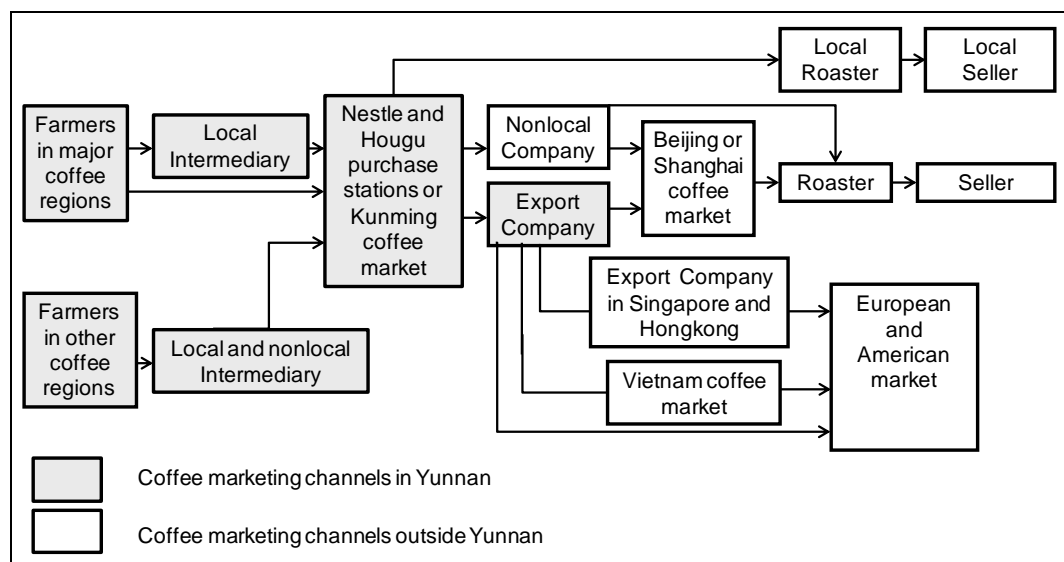


Source: Author (2010)

Without a significant improvement of farmers' management and repairing capacity, the bridging function of intermediaries is necessary for trans-regional market access and related transportation, especially in the Baoshan region. Nestlé instant coffee company has the biggest buying station in Simao region, which absorbs 25% of the coffee beans of the whole Yunnan

province. Hougou coffee company buys at least 50% of the coffee beans of Dehong region. Farmers in Simao and Dehong regions can bring their coffee beans to the relevant buying stations, while the situation in the Baoshan region is different. Local middlemen play a crucial role in the value chain. They can sell coffee beans to another regional intermediary. They can also bring coffee beans to buying stations in other regions or to the Kunming coffee market to obtain a larger benefit (Figure 32). Most coffee beans in Kunming are transported to the Shanghai/Beijing or Vietnam coffee market. Only a small part of the coffee is directly sold to the international market by export companies. There are many regional and trans-regional intermediate traders in the local coffee value chain. As lower value chain actors, farmers receive lower benefit. However, they have to accept the unfair coffee price of local intermediaries to avoid the relevant agricultural risks due to the strong price fluctuation as well as the shortage of market information and channels. Further investment in the improvement of capacity and requirement gives place to conservative saving deposits for unpredictable crises and disasters.

Figure 32: Coffee beans marketing channels



Source: Author (2011)

The dilemma of development

The local market price is based on the actual bid of the Nestlé buying station. Nestlé offers a daily bid in Yunnan based on the reference price in the New York Coffee Future Market (ICE price). To facilitate the coffee procurement in different plantation regions, the price of the buying station is normally stable in the first few months of the harvest. Coffee

intermediaries know the situation and offer a lower farm gate price. There is almost no price difference among the different coffee middlemen. In the first few months, the price fluctuation can vary within a small range in the village. Patience and prediction are important factors in the farmers' decision-making process. In 2008, almost no farmers were able to hold onto their stock for months and to wait for a possible price increase in Manggang. Shortly after the harvest they need to move out their inventory for a quick cash return to pay the household bills. For farmers, the dealers coming to the village to collect the coffee bean provide an easy and cheap way to sell their goods. Besides the above problems, the strong price fluctuation is the biggest danger for further economic development. Due to the shortage of timely and sufficient market information, the farmers are not sure if the benefit after months or outside of the village is definitely higher. They are reluctant to take risks in price speculation.

The international coffee price fluctuated intensively over the last several years, and greatly hampered the development of the local coffee farmers and caused high losses. From 2007 to 2009, the ICE coffee price increased. Correspondingly, the Nestlé buying station in Yunnan raised its offer. In 2008-2009, the farm gate price in October was 45% lower than the price in March. However, farmers in Manggang had sold their coffee beans in the first three months of the harvest season. When the price increased later, there were no coffee beans to be sold in the village. Based on previous experience, the farmers had gradually an idea about the price movement pattern. To obtain higher profits, storage facilities were gradually built in a few farmers' own houses. They took the financial risk and sold their coffee later. This worked well in 2010-2011. The local market price was increased over 100% compared with the harvest time in 2008-2009. A few farmers also planned to buy transportation vehicles to shorten the local value chain, and waited for a higher price the following year. However, in 2012 there was a sudden international coffee crisis. The buying station price sank correspondingly. The November price in 2011 was approx. 35% higher than the March price in 2012. On this occasion, Nestlé stopped its buying one month earlier (YDRC 2012). The price pressure increased. Local intermediary traders paid a lower price in the village (Table 16). Finally, all farmers cleared their stocks to avoid further losses. In 2012-2013, the price sank continually. Farmers stopped their plans of capacity improvement and were hesitant to invest further.

Table 16: Price differentiation in Yunnan

Harvest year	Farm gate price in Euro/kg ¹⁵	% on Fairtrade minimum price	Yunnan market price in Euro/kg	% on Fairtrade minimum price	Fairtrade minimum price ¹⁶
2008-2009	1.1	58%	1.6	84%	1.9
2010-2011	2.6	58%	3.9	86%	4.5
2011-2012	1.7	57%	2.4	80%	3

Source: Own illustration based on interviews, YDRC data and FLO (2013)

Under the strong price fluctuations, the shortened value chain shows obvious advantages. There are two prices in Yunnan, namely the farm gate price in the village and market price offered by Nestlé. Although both correspondingly fluctuate with the ICE price, there is a marked price difference (Table 16). Local intermediaries obtained 23-28% benefits on the ICE price, while Nestlé provided a 14-20% lower price compared with the ICE price. The large interest share achieved by many intermediaries and Nestlé increased the impact of the international coffee crisis. On the other hand, Fairtrade offered a minimum price for farmers, equivalent to the ICE price or higher. Although the Fairtrade minimum price is directly affected by the fluctuation of the ICE price, its superiority is obvious compared with farm gate price in Yunnan. It can be assumed that farmers' profit will greatly increase if they can enter Fairtrade business and build up a more direct linkage with Fairtrade importers. A small farmers' cooperative in a relatively closed society can benefit a lot from the protection of the Fairtrade minimum price and the international market access provided by Fairtrade certification, though the contribution of Fairtrade might be limited due to the well management of large cooperatives in Latin America (KIEMEN and BEUCHELT 2010:18). A shortened value chain and beneficial stable price provided by Fairtrade can significantly reduce agricultural risks as well as encourage farmers' further investment and capacity upgrading. To better reflect the possible contribution of Fairtrade and current dilemma of farmers in Yunnan, a case description is illustrated below.

¹⁵ Farm gate price was obtained in the interviews in Baihualing village

¹⁶ Minimum price is based on announced Fairtrade price for medium term and was adjusted with monthly ICE price index, 2013.

Case 1: Coffee Farmer Mr. Zhang

Coffee farmer Zhang is a 56 year old coffee farmer. He and his wife have shifted from growing rice and sugar cane to cultivating coffee beans. He was supported by the Dutch development project and learned the skill of growing coffee from his neighbour and Baoshan coffee research institute. Like others in the village, he uses most of his allocated family land to plant coffee. With the financial and technical support of the project, there was no great difficulty in the coffee transition phase. He has a 1.3 hectare coffee farm in 8 plots. He bought a motorbike for the transport. Although the motorbike can save a certain amount of time and energy, the plantation of coffee demands high labour input. He uses his own farmyard manure generated from the coffee pulp and skins, faeces of animals and humans, and maize stalk etc. To save money for fertilization, they have to collect different compost materials. Since the 8 plots are widely dispersed and located at different altitudes, the mature period varies somewhat. The whole harvest season takes about 8-9 weeks. All family members work in the coffee plantation to reduce the labour cost, especially in the harvest season. However, Mr Zhang has to hire outside labourers from other villages to fill the labour gap, and he faces the risks caused by rising labour prices and strong fluctuation of coffee prices. At the beginning of the coffee plantation, the profit was about 20% higher than for sugar cane. Through growing coffee, he could afford to send his child to school. The family also owns some simple processing equipments with which they shell, clean, and dry coffee beans before selling them to coffee middlemen who come to the village. In 2000-2003, the coffee price fluctuated strongly. In 2007 there was a heavy drought that caused large losses. Thanks to the capital they had accumulated over the previous years, the family avoided bankruptcy. Since 2008, the coffee price has greatly increased. Mr. Zhang and his family have already recovered from the losses and obtain a higher productivity. He knows there is a price difference between village and buying station price. However, he does not want to take the increased risks and investments to shorten the value chain. Based on his experience, he prefers to save money for hard times. In 2009, Mr. Zhang mentioned that he would be very satisfied, if the price were to reach 1.6 Euro per kg. In 2011, he sold coffee for 2.4 Euro and achieved gross profits of 16380 Euro. Today the profits are considerably reduced. He can only pay for the basic costs of his family. He will continue coffee growing, explaining his decision in the statement: 'If I change to another plant, I have to learn new agricultural techniques and invest a lot in the transition phase. The risk is too high. The

prices of other varieties are also not stable. The fluctuation is normal. Who knows, maybe the coffee price will be better next year.'

Source: Interview by author (2009)

Like Mr. Zhang, most farmers maintain their coffee plantations, and hope coffee prices will increase in the foreseeable future. 'It is sometimes a kind of gamble', said the village head. Although farmers are very disappointed about the current coffee price, their decision is made after long thought. They master basic coffee planting skills, such as seedling and pruning. The input is low compared with other crops. They also know a large share of their coffee trees is younger than ten years and are thus in the best growing period with high productivity. It would be a pity and lead to an immediate loss for farmers if they were to give up their coffee plantation. For dry lands, there are fewer alternatives to coffee. Therefore only 0.7% the coffee plantations in the wet lands have been eliminated. Some of the oldest coffee trees with lower productivity were replaced by citrus trees. A few families tended to act earlier. As a farmer said: 'if the price next year sinks further, more changes will be made.'

Figure 33: Coffee cultivation and multi-cultivation with maize in the village



Source: Author (2012)

6.3.1.4 Citrus reticulata

Development history and relevant reasons

Citrus is not a new cash crop for the peasants in the village. In 1965, 0.47 hectares were cultivated. However, the variety is new in the region. It can be considered as a by-product of a Dutch agro-forest project (FCCD Project Report, 2006: 121), since the introduction was on the platform of the project committee. The head of Manggang recognized the economic potential of citrus and wanted to promote plantations. To learn improved technology and introduce new citrus variety, he intended to visit the famous

citrus plantation region 'Binchan', 300 kms away. The proposal was presented in the group meeting. However, the finances could not be solved. The head was a member of the project committee and shared his idea in the committee meeting. Although the citrus introduction was not in the Dutch project scheme, it was inspired by the development concept of the project and presented the spirit of self-improvement. The committee got funding to support the activity. In the name of the committee, some villager representatives and the group head made a trip to learn about citrus plantation techniques. A breeder from Bingchan was invited to the village to teach the agricultural practices and build up a nursery. Every year, the committee members met three or four times to inspect the progress (FCCD Project Report, 2006: 121). After the Dutch project, the committee was dissolved. Relevant activities were also stopped. Although the breeding techniques are still challenging to the local farmers, the citrus plantation has proved to be successful.

Since 2009, the price of citrus has continually risen, and was 0.6 Euro per kg in 2013. Compared with 0.2 Euro in 2009, which is a 300% increase. In an interview in 2013, farmers mentioned they achieved an approximately 60% profit, while coffee could only contribute about 20%. For farmers, the citrus trade is very beneficial. As one said: '*Citrus consists of water. However, coffee beans have only part of the berry weight*'. The productivity of citrus is high, namely 60,000 kg per hectare with a value of 36000 Euro. At the harvest, a skilful farmer can pick almost 500 kg per day. He can create about 1.8 times higher value compared with a skilful coffee harvester. The high harvest efficiency reduces relevant labour costs, though the material cost cannot be ignored. Most families can handle the harvest themselves. Furthermore, there is almost no post-harvest process. The citrus is directly sold to regional middlemen. Although its market is limited at a local level, there is no sale problem. The citrus variety from Binchan is late-maturing. Its fruits are collected in March, while local ones are harvested 4 months earlier. In the region, there is less market competition. In the interview, the group head was proud that the citrus from MangGang has the highest value and is relatively famous in Baoshan.

The dilemma of development

Although citrus cultivation has its advantages, the plantation area has not greatly increased to date. There are several reasons limiting further development. The physical cultivation condition is a main reason. Unlike coffee, citrus can only be planted in wet land. This has largely limited the development potential of citrus, since the area of wet land is small and

generally located along the rivers. Most of the wet lands are occupied by coffee trees. For citrus plantations, coffee trees have to be destroyed. This is a big loss for the farmers, since many trees are young with high productivity. If the coffee price rises again, the change in cash crops might not be worth it, but only cause high risks. On the other hand, for citrus the inputs are large. Unlike coffee, the seedlings have to be bought from outside, which leads to higher production costs and related uncertainty for the farmers in the village. Besides the losses and investments, the 2-year transformation period increases the agricultural risks. A stable citrus price cannot be ensured in the future. Other villages can introduce the same variety and also offer citrus in March, as they have the capacity to produce citrus and enter the local market. The supply-demand relationship can change in a few years. The experience with coffee makes a lot of farmers hesitant.

6.3.2 Animal production

Compared with farming, animal production does not contribute to farmers' income, but the products are useful for self-consumption. It is also important for farmyard manure. In return, maize provides feed for the animals. Each household raises some chickens, pigs and ducks for their own consumption. Many years ago, the meat was only for festivals or holidays. Nowadays it is often consumed daily. Besides the occasional buying of pigs, there is almost no animal trade in the village. Local farmers prefer to buy pigs from neighbours because they are afraid of swine fever and other animal diseases from outside. In 1999, there were 15 water buffaloes and 7 oxen used for cultivation. The number was largely reduced in 2009, since cash crops were planted in most of the dry land. There were 6 mules used in the village for transportation, but have slowly been replaced by motorbikes and tractors.

6.3.3 Agricultural labour situation

The family is the major production unit. There are 104 families and 416 villagers in Manggang village. The number of labour force is 272 people (Table 17).

Table 17: Labour force situation in Manggang village 2010

	Villagers	Labour Force	Ratio
Male	212	139	65.6%
Female	204	133	65.2%
Total	416	272	65.4%

Source: Author (2010) based on interview and FCCD project report (2006: 99)

All family members participate in farming and running the households. The work is not clearly distributed. Each village member is expected to provide his contribution for his family if he has the time and ability. Generally, men are in charge of farm work with high physical demand, crop management with high technical demand and livestock usage, feeding and management. They are responsible for transportation of bio-compost, fertilizers, grains, and fire wood, handling crops, cutting fire wood, and harvesting. Women generally do both agricultural work and housework. They do farm work with low physical and technical requirement, like pruning, spraying pesticides, cutting grass to feed cattle, and harvesting. At home they cook, wash clothes, take care of the children and raise livestock. Planting and harvesting vegetables in small family gardens are traditionally assigned to women. In MangGang village, the food for pigs is usually cooked before feeding them, which increases the workload for the women. Old men feed stock, cut grass, collect fire wood, take care of grandchildren, etc. Old women help out with housework and take care of the children (Figure 34). In the evening, the whole family gathers together and watches TV. Sometimes men play cards and drink rice wine together.

Figure 34: Old women taking care of children and coffee harvest in the village



Source: Author (2009)

Changes in crop types greatly affect the local labour situation. Proper management needs sufficient labour support. Sugar cane is a classic

example with a complex cultivation system. It has generally five vegetation periods, namely germination, seedling, tilling, growth and maturation. To facilitate the relevant agricultural practices, the distance between furrows is about 90-100 cm. Management is necessary, even in the middle and later phases. In the growth phase, fertilizing and ridging are important to efficiently provide plant nutrition. Dead leaves are cut to improve ventilation and light transmission in the field. Cutting needs to be performed in the mature stage. Furthermore, the maintenance of soil humidity and prevention of water logging are crucial before the final harvest.

A shortage of labour generally exists. The villagers are busy especially in harvest season. Harvesting is mainly done by hand and not by machines. There is a limited household labour supply in the village, which becomes an issue during the harvest time. The post harvest process has to be done, while the household workload is unavoidable. Although elders and children can also work, most of them need additional labour from time to time. In the village, there were about 70 outside labourers from the other side of Nuijiang River in the harvest season, who were paid by the day. Besides coffee harvesting, some villagers, who plant *Cunninghamia lanceolata*, hire them and their livestock for timber cutting and transportation. During the off season, more than 10 hired migrant built houses and furniture for the villagers. Since the labour demand is seasonal and temporary, the migrant workers simply live and eat with their employers' families.

When the price of coffee was high, the rising labour cost was not a big problem for farmers, who were able to pay the workers in cash. However, the coffee price has fluctuated strongly in the last years. It increases the risks and uncertainties in agriculture. The supply-demand relationship of the labour situation also becomes unstable and unbalanced. Facing these challenges, an efficient usage of the labour force can possibly be one of the solutions to stabilize the agricultural situation. Labour demand depends on many factors, such as season, agricultural practice and on- and off- year fruiting. If the labour force, which is used to harvest different crops, is evenly distributed throughout the entire year, labour resources can be effectively used to avoid this timing conflict. Introducing a system of multiple-cultivation seems to be necessary. This can eliminate a situation that farmers have no choice but to concentrate on one particular crop that brings the highest income value and to neglect the rest. Citrus and coffee are a suitable combination (Table 18). They have less timing conflicts in their agricultural practices. The time intervals allow farmers to simultaneously plant other crops. The harvest workload for citrus is

relatively light compared with sugar cane and coffee. During the citrus harvest season, farmers have some time for coffee management. The pruning work for coffee can be arranged in February, one month before the citrus harvest. The efficiency of multiple-cultivation can be also proved by the fact that maize is still planted by local farmers. Maize does not have a high economical value and cannot become a dominant variety for improving farmers' livelihoods. But its harvest season does not conflict with the major cash crops. Farmers use maize to feed their animals and burn cobs to cook food. It is practical to have an extra saving for each household.

Table 18: Farming time table in the village

Month	Sugar Cane	Coffee	Citrus	Maize for summer	Maize for winter
1	Harvesting	Managing and sowing	Spraying pesticides and managing		Managing
2	Harvesting	Pruning and seedling	Preparing	Sowing	Managing
3	Harvesting Sowing	Pruning and seedling	Harvesting	Weeding Fertilizing	Harvesting
4	Managing	Cutting for regeneration, managing	Harvesting	Managing	
5	Weeding Fertilizing	Fertilizing, spraying pesticides and transplanting	Fertilizing and managing	Ridging	
6	Managing	Spraying pesticides and transplanting	Pruning and draining	Managing	
7	Fertilizing	Fertilizing	Pruning and draining	Harvesting	
8	Managing	Harvesting and post harvest process	Managing		
9	Cutting dead leaves, fertilizing and ridging	Harvesting and post harvest process	Fertilizing		
10	Cutting dead leaves, fertilizing and ridging	Harvesting and post harvest process	Managing		Sowing
11	Cutting dead leaves and preventing water logging	Pruning	Spraying pesticide and managing		Fertilizing

Month	Sugar Cane	Coffee	Citrus	Maize for summer	Maize for winter
12	Cutting dead leaves and preventing water logging	Preparing	Managing		Ridging

Source: Author (2010) based on interviews

On the other hand, each household has various crop combinations, dry and wet land ratios, and different family situations. Although most farmers focus on coffee, the labour demand in each household can be different. Based on village-wide coordination and cooperation, it is possible to efficiently allocate the labour forces to achieve a win-win situation for all participants. There are two ways for the labour force arrangement. One is to engage in a labour-exchange arrangement with fellow villagers, thus one can work for others when one has time to spare and have others work for one when help is needed. The second way is to hire individual villagers and pay them daily.

Labour exchange was popular in the past. Facing limited natural resources and productivity, the villagers have to use different tight relationships, either kinship ties or friendship. Good friends or neighbours work together. They enjoy the companionship of their fellow workers, and spend time together even when they are not working as a team. Labour exchange is a result of actual requirements and conditions. In the coffee harvest season, the labour shortage is about 25%. Coffee fruits are picked by hand, which demands more labour and causes a seasonal shortage of labour. Labour exchange can partially solve the problem. It can be arranged on working days, i.e., one day's work for one day's work. Although labour exchange is free of cash charge, it can sometimes take a lot of time and energy. If a farmer needs five men to work for him, for example, he has to approach each of them and find a date suitable not only to his time schedule but also to that of the other five helpers. He has to allow time for arranging such schedules, which require planning and negotiations.

Although labour exchange is still practiced among the households of close relatives, this mode of acquiring outside help has been decreasing in popularity. Nowadays, the young farmers tend to hire their neighbours and pay in cash when necessary. For the villagers from rather poor families, it is also the best way. There are a few poor families in the village, since some of their members are disabled, drug addicts or very sick. They normally own little land or even none at all. There is not much farming work in labour exchange. They prefer to be paid to support their families. Hired

labour is preferred in the village. The position of employer-employee relations is not fixed. When someone has spare time, he can in turn hire himself out for cash. Although the import of labour from other villages can be hardly avoided, farmers prefer to first hire local persons. Based on the village-wide cooperation, an efficient mobilization of local labour resources has the advantage of being flexible, simple, and frugal. The cooperation among families can bring a direct economic contribution for all participants, as they benefit from local social capital. A description of social capital can reflect the organizational mechanisms and relevant eco-social conditions in the village that can possibly contribute constructive implications for Fairtrade certification and its farmers' cooperative. In the next chapter, local social capital is studied from the perspectives of trust, norms, network and collective action.

7. Social capital in villages

Trust is the core of social capital and the major indicator presented in this chapter, especially from the dimensions of person and organisation. Trust can be considered a positive attribute for individual persons. From a general impression to a concrete relationship, the relevant factors linked with persons in the research area are compared and investigated. Since the research aims to provide recommendations for the establishment and management of Fairtrade farmers' cooperatives, trust and related items need to be focused on from the perspective of collective groups. The emergence frequency of specific trustworthy actors can reflect the trust level in different collective entities, while a categorization is statistically conducted among different units in various scales, namely family, natural village and administrative village. However, the statistical methods cannot fully identify homogenous subgroups and their leaders. The performance efficiency and operation mechanism of various groups have to be illustrated by norms that are based on local traditions and culture. Furthermore, collective action is focused on, as it is the result of trust and norms. 'Every tree is known by the fruit it bears (LUKE 6)'. It provides a possibility to observe the homogenous subgroup from different aspects. The cooperation mode favored by the villagers is also researched, since the results could be applied in Fairtrade organisational mechanisms in the future. Finally, network is investigated, which is an important indicator for social capital. Population movement and local organisations are studied to fully exploit the potential for Fairtrade certification and its farmers' cooperatives.

The survey and related interviews took place in Baihualing administrative village. Manggang natural village is the largest village in Baihualing and the central location in the research. A total of 217 questionnaires were applied there. Another 60 questionnaires were performed in two other natural villages to prove that the opinions in Manggang represent the rest of the villages. The results from the three natural villages in Baihualing turned out to be very similar.

7.1 Trust

For a better classification of the homogenous group, trust is studied from the perspective of general and specific trust. While general trust exists for most people in a certain type of group, specific trust links with persons with local context and background. It embeds in personal relations, which can be identified by the appearance frequency in a series of relevant questions.

Based on the reports of a previous project and telephone interviews with experts, the production group (natural village) is chosen as the major scope for the assessment of the overall goodwill and related intentions. Later, statistical methods are used to generally classify main collective units at the local level based on the indicators, such as honesty, reciprocity and concern.

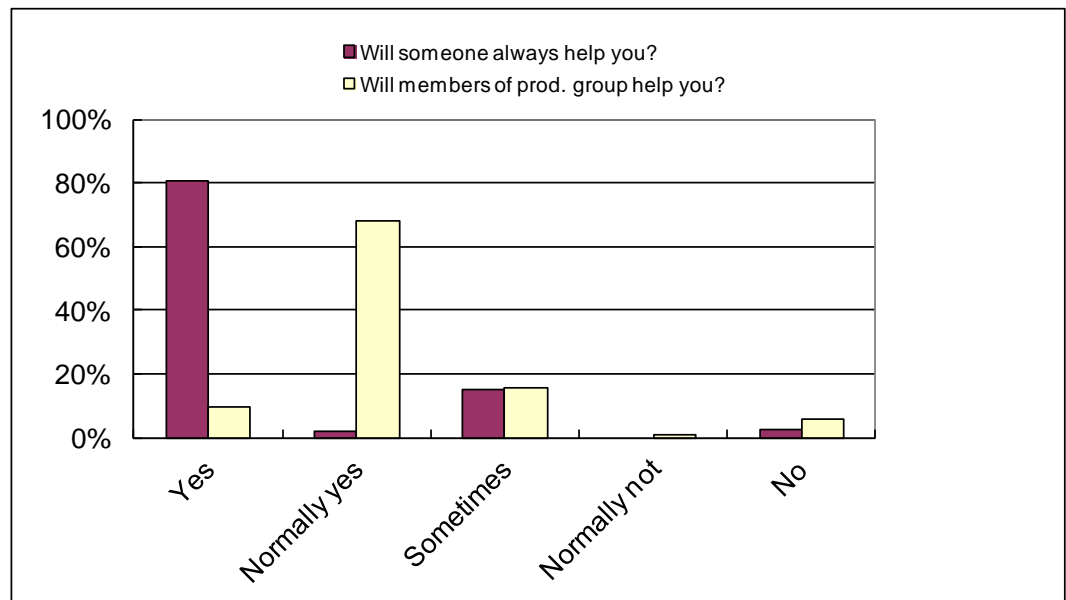
7.1.1 Overall relationships in the villages

First of all, it is necessary to know the farmers' general attitudes and belief of trust that is beyond reasonable and concrete limits. The first question looks at personal related trust, which is focused on general relationships linked with individuals. The second question refers to overall trust drawn from the participants' general impression about members of the production group. A five-point answering scale ("Yes", "Normally Yes", "Sometimes", "Normally Not" or "No") was used to collect the data. For the first question, the answer 'yes' received the highest value. Related to personal relationship or experience, participants show more confidence in this answer, since the general relationships in village are very good. For the second question, on the other hand, the certainty and confidence level is reduced, since the scale is enlarged to more persons in the production group. The majority of respondents answered that most members of the production group will normally help. The sum of answers 'yes' and 'normally yes' is 78% (Figure 35). If the choice of 'sometimes' is included, the total positive responses can even reach 93%. It indicates that most of villagers have high expectations and a good impression about their neighbors and members of the production group.

Questions:

- If you are in trouble, does someone always come to help you?
- If you need help, will most of the members in the production group help you?

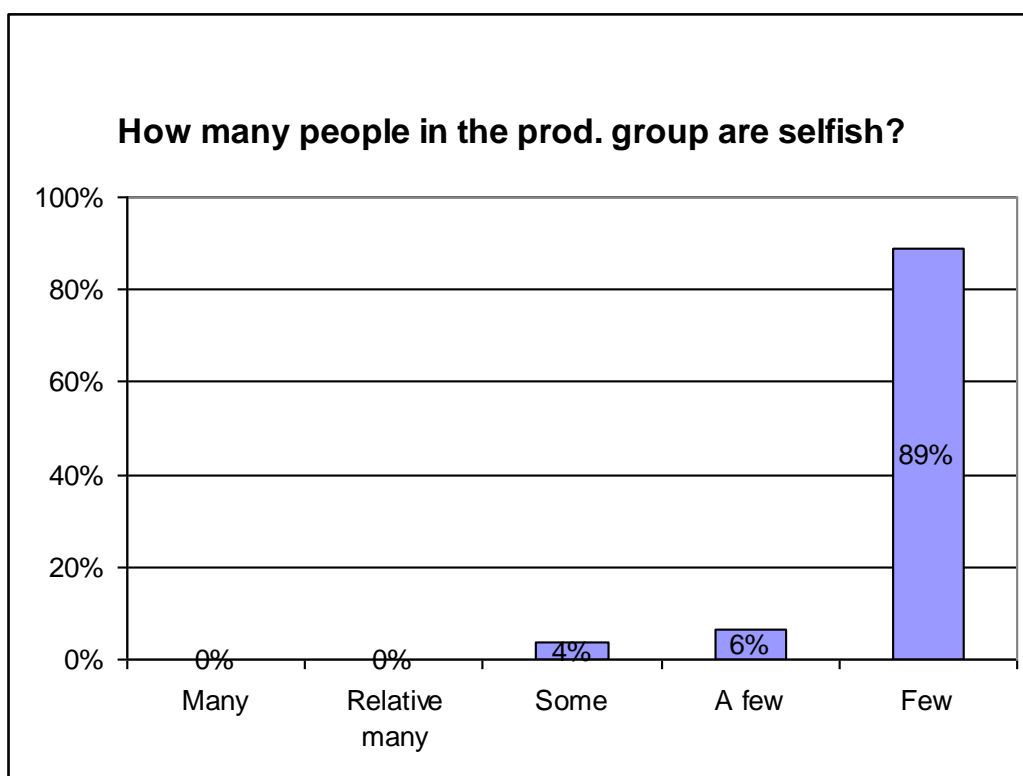
Figure 35: Comparison of trust in the village



Source: Author (2009)

To gain a comprehensive overview of the situation in Manggang village, a negative character, namely selfish, is chosen as the point of observation. The question regarding the perception of selfishness in the production group shows again that villagers have a good impression about the members of group (Figure 36). Only 4% see some others as selfish, but the vast majority, (89%) regard only few as selfish. The option of 'many' and 'relative many' were never chosen as an answer.

Figure 36: Trust in production group



Source: Author (2009)

7.1.2 Concrete relationships among villagers

Beyond the general impression, detailed information can be obtained from the research about specific relationships. The frequency rate of the most trustworthy persons can reflect the trust situation in different collective groups linked with the Fairtrade farmers' cooperative. Farmers were asked to name the top three persons they trust in several different questions. This mode of question can possibly introduce new actors and discover the potential loopholes in the research investigation, as the answers are based on respondents' perception about the specific person in the local situation. Related scenario simulations are concentrated on immediate and natural reactions in case of emergency that can often happen in the daily life of farmers. Respondents were offered the following list of responses which they could choose:

- Family member
- Neighbor
- Villager in the nature village
- Villager in the administrative village
- Head of natural village

- Head of administrative village
- Whoever I see
- Others (Please specify)

Figure 37 documents the four questions and their ranks. According to the secondary data, reports of previous projects, telephone interviews with local experts and a pre-test with some farmers, the questions were selected considering local reciprocation forms, social values, and the behaviour of reciprocity. Farmers had to give the three most preferences. They could choose them from the list of trustworthy persons. They could also write down preferences that were not on the list. The incidence rate of specific persons or groups can reflect tensions, scope and closeness of different persons and groups. It is clear that scores within the family rank high, since relatives help each other. The option to ask for help from neighbors received a relatively high percentage and comes second, followed by people from the administrative village.

An interesting aspect observed during the interviews is that a certain numbers of villagers in Manggang cannot identify the difference between neighbors and villagers in the nature village. They consider all residents in the nature village as neighbors. This is because the village is small and villagers are close to each other. The term neighbors should include not only those who live next to their houses but also those within the same village. To maintain the authenticity of the survey results in Manggang, the participants in the survey were not forced to accept a standard definition of neighbor. They are allowed to freely interpret the meaning of neighbor from their own point of view. Therefore, there is a clear overlap situation between two options for some farmers. It can possibly explain why the percentage of ‘people in the nature village’ is lower, while the result for general trust is pretty good in the nature village. Benefiting from the precise definition, the choice for administrative village is third in the ranking.

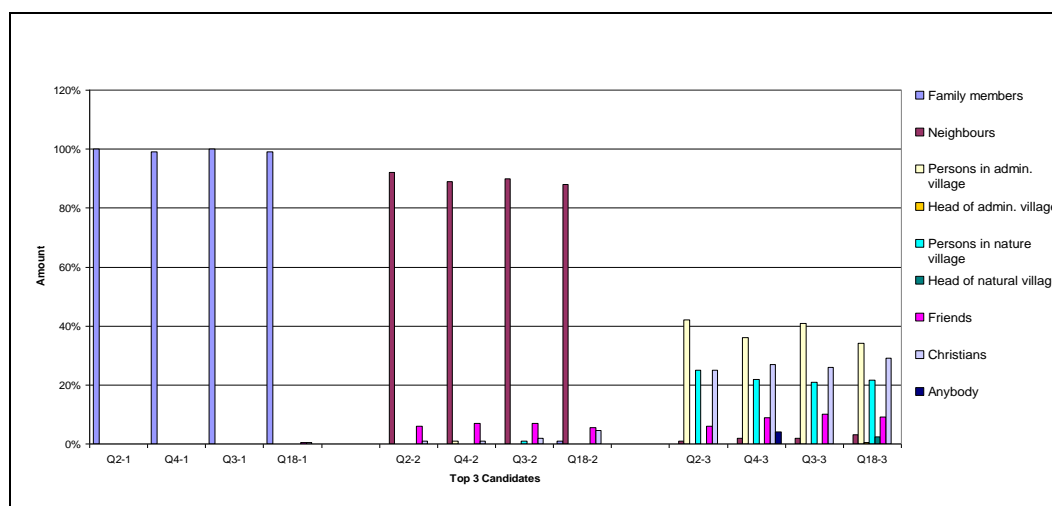
Figure 37: Table of ranking of trusted persons

Trustworthy persons list	First preference		Second preference		Third preference	
Q2 If you have to go away suddenly, who can you count on to take care of your children?						
Family members	217	100%	0	0%	0	0%
Neighbours	0	0%	200	92%	3	1%
Persons in administrative village	0	0%	0	0%	92	42%
Persons in natural village	0	0%	0	0%	54	25%
Friends	0	0%	14	6%	13	6%
Christians	0	0%	3	1%	55	25%
Total Amount	217	100%	217	100%	217	100%
Q4 Suppose you have to go away for a while. In whose charge could you leave for your fields?						
Family members	215	99%	0	0%	0	0%
Neighbours	1	0%	193	89%	5	2%
Persons in administrative village	0	0%	3	1%	78	36%
Persons in natural village	1	0%	1	0%	48	22%
Friends	0	0%	16	7%	20	9%
Christians	0	0%	3	1%	58	27%
Anybody	0	0%	1	0%	8	4%
Total Amount	217	100%	217	100%	217	100%
Q3 With regards to lending and borrowing money, who do you trust?						
Family members	217	100%	0	0%	0	0%
Neighbours	0	0%	195	90%	5	2%
Persons in administrative village	0	0%	0	0%	89	41%
Persons in natural village	0	0%	3	1%	45	21%
Friends	0	0%	15	7%	21	10%
Christians	0	0%	4	2%	57	26%
Total Amount	217	100%	217	100%	217	100%
Q18 If you are in trouble, who will primarily help you?						
Family members	215	99%	2	1%	0	0%
Neighbours	0	0%	191	88%	7	3%
Persons in admin. village	0	0%	0	0%	74	34%
Head of admin. village	0	0%	0	0%	1	0%
Persons in natural village	0	0%	0	0%	47	22%
Head of natural village	0	0%	2	0%	5	2%
Friends	1	0%	12	6%	20	9%
Christians	1	0%	10	5%	63	29%
Total Amount	217	100%	217	100%	217	100%

Source: Author (2009)

The differences among various choices are displayed in figure 38. It is clear that the second rank has a big advantage over the third one, while the distance between the first and the second is obviously small. People in Manggang do not have very high expectations of the villagers in the administrative village. The percentage ‘friend’ is low. It seems that the support of family and neighbors is more popular and convenient. People within the same family circle help each other and their neighbors in their daily work and life in the natural village.

Figure 38: The comparison list of candidates



Source: Author (2009)

7.1.3 Classification of collective units

Questions about honesty, reciprocity and concern were presented in the survey to reflect the level of trust and its difference among various groups. Based on the results of previous projects, telephone interviews before the fieldwork and the feedback of trial tests, family, natural village and administrative village were chosen as research groups with clear definitions of activities in daily life. The villagers were asked to comment on three collective units, namely family, natural village and administrative village (Table 19). For evaluation, the lowest trust received 1 point while the highest received 5 points. Because the data consists of discontinued points and has a non-normal distribution, the Kruskal-Wallis test was applied. It is difficult to classify three groups at a time, since the first hypothesis means that at least one group's average value is different from the others. Three collective units have to be compared in pairs and marked in sequence. From the subdivisions of 'mean rank', it is clear that the mean distance between trust in family and administrative village is the largest. If there is a significant difference between 1 and 2 groups or between 2 and 3 groups, it is not necessary to compare family and administrative village. There is definitely a significant difference between these.

From the data of asymptotic significance, it is clear that all three groups have significant difference with the other two. Such situations can be found in all three factors, namely honesty, reciprocity and concern. This proves also the positive correlation among the factors and close relationship with trust (Figure 39). The administrative village has the lowest value, while the

family has the highest score. Natural village is in between. This means people greatly trust their family members, while collective action can be expected in the natural village with satisfactory results about honesty, reciprocity and concern.

In addition to the survey, the participants explained their decisions in interviews. Among the family members who are genetically related and share the same ancestors, the feelings are natural and prior, as a farmer stated *'Of course, family is different from others'* (Interview 7). In the administrative village with its large population, the participants do not know the entire population. It is then difficult to evaluate the level of honest and trust. Furthermore, participants' ideas are almost impossible to be heard and respected by the rest of people in the administrative village as mentioned by a respondent *'I only know some persons in the village. How can I judge the others? The village is so big. How can I concern? Anyway, who will listen to me?'* (Interview 7). It is not logical for participants to concern or to take part in the events at the level of administrative village. However, the trust level of people in the same production group is significantly different. They live together for long time and know each other well, as stated by a farmer *'Although I do not like to pry, there is no secret in the production group'* (Interview 18).'

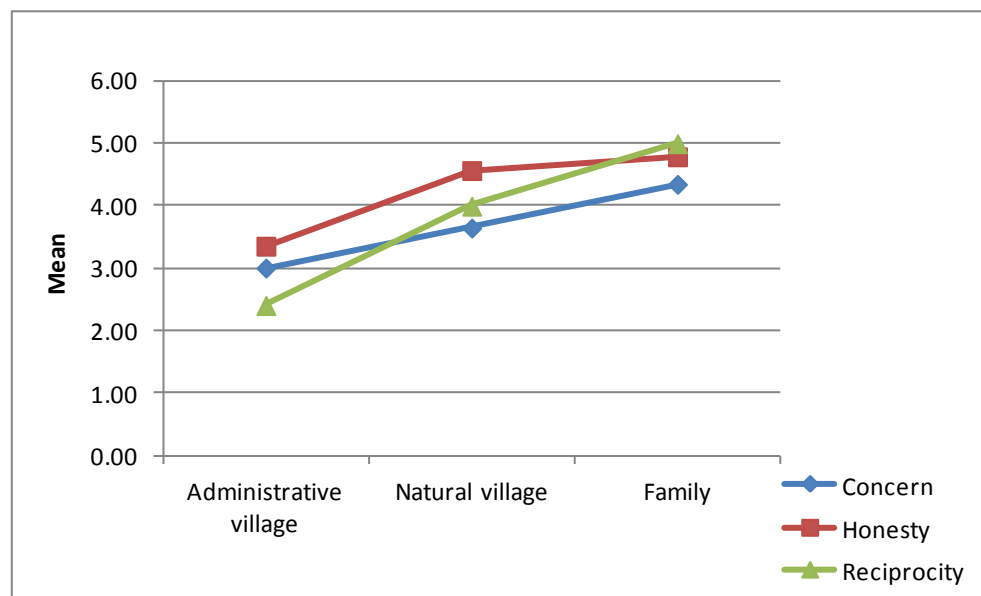
The high level of acquaintance creates the basis of judgment and provides the motivation and willingness for concern and reciprocity. Therefore, it is not difficult to explain why there is a significant difference between natural and administrative villages.

Table 19: Honesty, reciprocity and concern

Variables of trust	Group*	N	Mean Rank	Chi-Square	Df	Asymp. Sig.
Honesty	1	217	236.35	15.758	1	0.000
	2	217	198.65			
	2	217	299.01	206.917	1	0.000
	3	217	135.99			
Reciprocity	1	217	325.00	423.160	1	0.000
	2	217	110.00			
	2	217	324.60	375.920	1	0.000
	3	217	110.40			
Concern	1	217	262.35	66.713	1	0.000
	2	217	172.65			
	2	217	264.00	67.860	1	0.000
	3	217	171.00			

Group 1= Family, Group 2=Natural Village, Group 3=Administrative Village
Source: Author (2009)

Figure 39: Comparison of concern, honest and reciprocity in three social groups



Source: Author (2009)

The main purpose in studying trust is to identify and classify different collective units according to their trust levels. It starts from the people's general impression of each other in the village. Most villagers have a good feeling towards the other people and consider them being honest and accommodating. Certainly, it is only a general impression. When a villager

meets any specific problems, he will ask specific persons for help. To achieve intensive cooperation and efficient performance, it is necessary to further observe the personal relationships. From the priority selection table, it is obvious that family members are the most trustworthy and reliable persons with a small group size, high linkage density, and good acquaintanceship. At anytime, a person can receive support from his relatives. The concept of family brings people close together. Its cohesion is undoubtedly strong. The villagers also trust their neighbors, though this feeling is not as strong and intense as between family members. About 90% of the villagers will seek assistance from their neighbors without hesitation. It is interesting to observe that the percentage of 'friends' is below 10. Compared with the results for 'neighbors', it is very low. It is possible that an overlap situation exists in the investigation. It could mean that neighbors are also often friends. This confirms the good and harmonic situation in the natural village from another aspect.

Although the option of 'persons in the administrative village' stands is third, it is necessary to mention that an ambiguous concept exists. Many villagers cannot clearly tell the difference between neighbors and persons in the natural village. They consider all villagers as their neighbors due to the limited scope of the nature village. To authentically show the respondents' ideas, they can choose what they want and are not forced to accept any specific concepts about neighbors. It is obvious that the ranking is thus affected. Some villagers do not choose the option of 'persons in natural village', if they select 'neighbors' for second. Two concepts in the respondents' minds overlap, which can explain why an inconsistent result is obtained in the statistics. Furthermore, 'neighbors' is excluded in the classification of collective units due to the ambiguous definition.

In the final step, the trust level is statistically compared among the three institutional entities, while the three items of trust present coinstantaneous correlation. A significant difference can be found in all pairwise comparisons among the three units from three perspectives. If the mean value comparison is also included, this becomes more obvious. The trust level of the family is significantly higher than that of the natural village, while the trust of the administrative village is significantly lower than that of the natural village. The ranking is in the order 'family', 'natural village' and 'administrative village'. All differences among these are statistically significant. This means people strongly trust their family members, then come the villagers in their natural village. In the other interviews, the respondents explain their decisions. Among the family, members are genetically related with the same ancestor. Related feelings are natural and

prior. In contrast, in the administrative village where there is a large population, people do not know everyone there. It is thus difficult to evaluate the level of honesty and trust towards people from the administrative village. Moreover, the respondents' ideas are almost impossible to be heard and respected by the rest of the people in the administrative village. It is not very meaningful to care about or participate in the events at the administrative village level. HE, X. (2009) obtained similar results with the use of the 'we' concept to determine the function of different collective units. However, the villagers from the same natural village feel significantly different about each other. They have lived together for a long time and know each other well. The number of villagers and the scope of the village facilitate also acquaintances and information transparency (JIN, Q. and LI, W. 1992: 31). The relatively high level of acquaintance builds up the basis of this judgment and provides the motivation for their concerns and reciprocity. Therefore, it is not difficult to explain why there is a significant difference between natural and administrative villages.

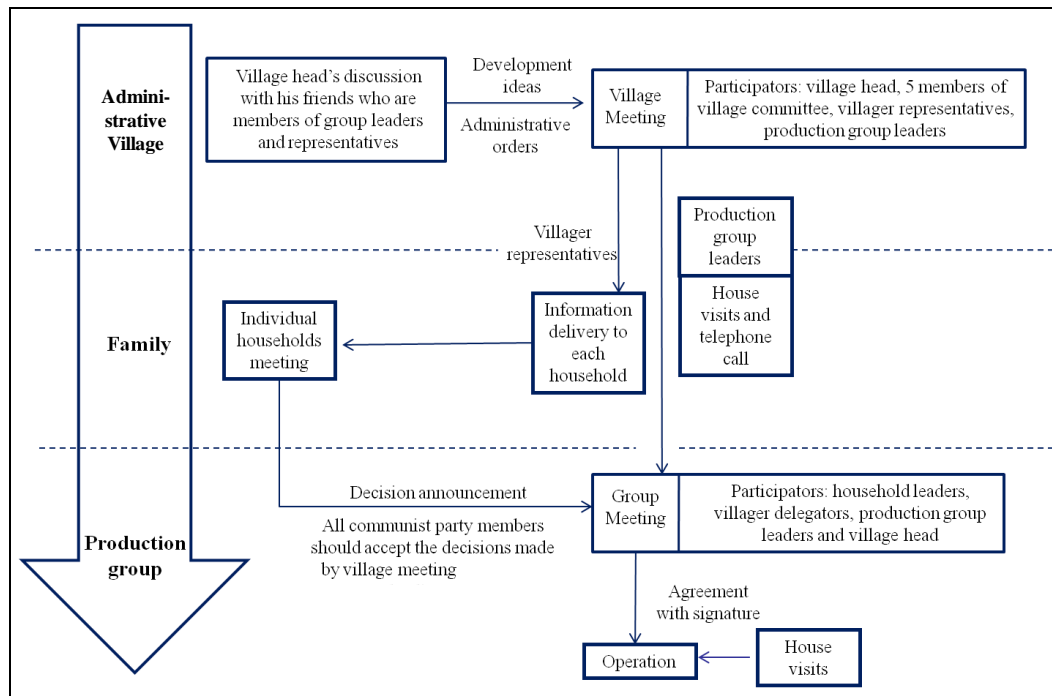
The purpose of classification is to generally sort out the homogenous subgroups and the federation platform for a Fairtrade certification cooperative. However, statistics can only identify differentiation levels and classify collective units. It is almost impossible to determine the homogenous subgroups and the federation platform without the analysis of norms, collective action and network.

7.2 Norms

Norms exist in different groups and regulate members' behavior through rewards and sanctions. They are based on power allocation supported by local traditions and reflected in the decision-making process. From the previous analysis about trust, family, production group and administrative, villages are sorted out, which are important factors for farmers' cooperation in daily life. For the collective actions in Fairtrade certification, norms need to be studied to illustrate the organisational mechanisms at the local level. Norms are linked to concrete persons. Relevant leaders are specific representatives and performers of norms. In the institutional and cultural context, their routine activities and procedures embody norms and the relevant operational system. While the national law and provincial regulations provide a basis for the organisational mechanisms, the perception and implementation generated from the local situation strengthen a norm's stability and continuity. With the support of other

village and production group leaders, the chief village head, who is elected for five office terms, has described the local organisational mechanisms for the collective decisions in the villages based on norms for a long period, which can be possibly an option for the performance of Fairtrade certification (Figure 40).

Figure 40: The flowchart of organisational mechanism



Source: Author (2013), illustrated through group discussions

The ideas or orders have to be transmitted and discussed sequentially in the three collective groups. This process can be also considered as three stages in the mechanism of a collective decision. To achieve an agreement, the decision needs to be first made at the macro-level (administrative village). Later it will be discussed at the micro-level (family). Finally, it has to be confirmed at the meso-level (production group). In each step, there are correspondent promoters and deciders according to local traditions, culture and social values. Relevant indicators are comprehensively described in all three stages to have a clear understanding about norms and the related operational system.

7.2.1 Administrative village

Based on the general election, the power structure and relevant figures in Baihualing can properly reflect local social capital with less external influence. Including village heads, a village committee with five members

is directly elected by the villagers. With the arrangement and permission of village heads, they are respectively responsible for economic development, security, family planning, health, senior services and fire safety. Although they have a certain social position, they receive no salary or subsidy. Only the village heads are paid for their work in the village.

7.2.1.1 Village heads

There are usually two positions for village leaders, namely chief head and vice head. The term of office is three years. Villagers have suffrage right in the election when they are over eighteen years old (VILLAGE ELECTION LAW 1998). Since the administrative leaders are also group secretaries of the Community Party in the village, party member identity for a minimum three years is a precondition for all candidates in the election, as well as at least 9 years' school education to prove his personal ability (YUNNAN GOVERNMENT 1999). Administrative leaders can be re-elected (YUNNAN GOVERNMENT 1999). For example, the leader in Baihualing administrative village has been in office for 13 years. Similarly, the one vice head has held office for 10 years. The importance and necessity of the election are well known by the villagers. In the interviews and group discussions, they often mentioned election as a crucial process for power allocation, while the villagers prefer to choose the persons with a good reputation, high trustworthiness and certain economic skills. The village head has two identities, as a kind of boundary spanner. He is the extension of governmental power, since he takes over the governance function. The position and related prestige are authorized by the government. He is also the agent of the villagers, because he is elected and trusted by them. He needs to handle the possible conflicts between bottom-up wishes of villagers and policies/orders (FEI, X. 2007: 288). The balance of interest between villagers and government has to be found by him.

In Baihualing village, the vice head has a strong coordination ability and mild nature. His main task is to assist the chief leader. As an assistant, he has less stress. Every month he obtains a salary and is respected by the villagers. He is satisfied with his situation and 'humbly' accepts the leadership of the chief head. In the interview, he explained why he wished to avoid greater political responsibility and maintain the good relationship with the chief leader. Although some young villagers wanted him to run for the chief head election over the last 10 years, he clearly rejected the advice. For 13 years, the chief head has occupied the position and won the village elections five times. His important role in local society is remarkable. He is

well respected in daily life, although he cannot directly make a decision for the whole village. Officially he works as a kind of messenger between town and production group. He is active at the level of production group, while the relevant decisions are made by each household head. However, he is the only person who can trigger the organisational mechanisms for the village-wide decision-making process. He has the power to decide the timing and topics in the village meeting. The administrative orders from the town are delivered by him and presented in the meeting. Furthermore, he has the right for the personnel management of other committee members in the village and plays an important role in the village committee. Members normally respect him and accept his advices. With the support of village committee, he has a strong influence in the village meeting.

7.2.1.2 Village meeting

Due to the large population in the village, the meeting is organised for the delegates of production groups at the administrative village level. They are the leaders of production groups, village heads, members of the village committee and village representatives. The meeting is usually about the administrative orders from the county or the ideas of the chief village head about the economic development. Although it can be organised according to Village Election Law, the meeting in Baihualing village can only be ensured for the annual report at the end of the year. Most meetings are not regular but based on specific requirements, such as population census, social security policy, disaster relief and agricultural development. The frequency is not high, generally once or twice a year. According to Village Election Law, a village meeting should be arranged if 10% of the villagers want to have one. However, there has been no such case in Baihualing village. The meeting convener is usually the chief head of the administrative village, since he is the first one to be informed by the town government. If he has any economic development ideas for the village, he can also organize a meeting to announce it. Except for him, nobody wants to initiate a meeting to challenge the authority of the village leader. It is not based on laws or regulations, but is established by usage with a long history. Before the meetings, the head will talk with his colleagues and supporters in Baihualing village. A primary proposal will gradually be set up. Then the idea will be introduced in an organised village meeting, which usually is a platform of information exchange and general discussion. For the administrative order, the central part is focused on the promotion methods and relevant monitoring criteria. For development ideas, there is a public voting at the end of the meeting. Opponents can raise their hands to express

their disagreement. Although it is difficult to obtain all votes for the village head, his advice can be always passed with the assistance of committee members and supporters. Since there is no final decision, the atmosphere is relaxed to some extent, typified by a production group leader's statement: *'The announcement of policy is easy, whilst the implementation is difficult and has to be done in the production group (Interview 1).'* After the meeting, relevant information will be transferred by the participants in the natural village. The construction of an electricity network is a typical sample to illustrate the process and function of the village meeting. There was no electricity in the village. In 2001, the village electricity network project was promoted in the whole Yunnan province (YUNNAN GOVERNMENT 2013). The leader of Baihualing village was informed by the county government about the construction plan. 50% of the relevant expenses were paid by the provincial electricity bureau, while the rest had to be collected in the village in terms of labour investment and fund raising. The leader believed it was a good idea to improve the local livelihoods, while villagers had certain economic power to support the construction activity due to the development of local agriculture. However, the confirmation of the specific financial and labour contribution of each household was one of the main challenges. The chief head communicated with his supporters and friends about the idea. He had a lot of work experience and knew the general economic situation in the village well, while the consultants came from different production groups and brought the latest information. Based on sufficient information, an average investment amount was estimated for each family in the village. The wish for electricity was strong, while the contribution amount was reasonable. Most of the delegates supported the construction proposal, although some were hesitant about the obligatory nature. During the extensive discussions, the relevant news was spread in the village. A village meeting was organised by the village leader to officially announce the plan. Before the meeting, the leader discussed the proposal with the delegates, who support him. The loud chatter attracted the attention of other delegates, while the approval and compliments created a beneficial atmosphere for the head. In the meeting the plan was first introduced and explained. Later, in the discussion, most delegates agreed with the plan. However, some of them preferred to have some operational space and did not want to give an absolute guarantee. As expected, the obligatory part became the focus of meeting. Facing the arguments, the village head suggested a compromise to facilitate the proposal. Only participators in the project can have electricity access. The promotion process and inspection details were emphasized

several times to achieve a 100% participation rate. Although the speech of leader was contradictory to some extent, delegates could understand what he actually wanted. In the voting nobody raised his hand against the leader. The proposal was further delivered to each production group and household. Since it was a good idea to improve the local livelihoods, it was efficiently performed in the production group (Relevant promotion process will be illustrated in the sections of family and production group). All households joined in the project. The construction was successfully finished.

7.2.1.3 Village rules

Although final decisions are not made at the level of the administrative village, many activities have to be operated within the scope of the village. The village rule is a typical example. Traditional rules in the village are not contradictive to the constitution and laws. In the beginning, they were not in written but in oral form. In 1999, the agro-forestry and community development project proposed and supported the village committee in the official release of the rules as part of the community self-management program, while the environmental protection was integrated in the rules (FCCD PROJECT REPORT 2006: 117).

1. Villagers are responsible for the comprehensive improvement of the socio-economic development in the village.
2. Citizens have rights and responsibilities according to the constitution and laws. In the village, they are responsible for irrigation construction, road construction/repair, forest planting/protection and other public services.
3. According to the serious level, activities damaging production, environment, public facilities and village security are punished.
4. Villagers are responsible for protecting the forest, maintaining the ecological balance, and extinguishing forest fires.
5. Villagers have to contribute to mutual respect, reciprocity, harmony and solidarity among ethnic groups, associations and persons.

Although the rules could be partially considered as a supplementary of laws and reflect the principles of village management, they seemed to be general and vague. Especially when economic reform has become a major issue for 30 years, some new problems emerge in daily life, such as drug addiction and social security. To cope with changes in the village, rules needed to be regularly amended or rewritten for the specific and practical situation in local society. Therefore, six new rules were announced on 12 June 2003.

According to the power and functions of the village, economic punishment is chosen as the way of sanctioning. Severe crimes have to be solved by state juridical organs, such as local police department and law office. The main rules were initiated by the village leader, drawn out after the discussion in the village committee and declared in the village meeting. Most of the details were formulated at the level of administrative villages, which are based on a compromise after sufficient discussions and reflect the requirements of reality. Later, the rules were discussed again among family heads in the production group meetings. Despite some slight modifications, final agreement was achieved and documented with the signatures of family heads. In the following, the village rules are presented:

1. To stabilise the security in the village, the report on people with drug possession must be proved. Otherwise it is considered as a false alarm or rumor.
2. Petty theft must be punished. Except when losses are recovered, a penalty between 100 RMB and 1,000 RMB will be charged, depending on the degree of a crime.
3. The penalty for drunkenness in public intoxication and disorderly conduct (quarreling and fighting) ranges from 500 RMB to 1,000 RMB.
4. Trashing motorcycles and vehicles of tourists is prohibited. The fine is 1,000 RMB.
5. Assault, vandalism, human abuse and animal cruelty are punished with a 500 RMB fine.
6. People chopping down trees without permission and endangering wildlife will be a fine with 500 RMB to 1,000 RMB.

Enforcement is regularly monitored and evaluated by the production group leaders. The leaders live in the production group and know their members very well. Based on the high amount of information on daily life, they have a general impression about local conditions and each member's character, habits and personal history. When the rules are violated, they are first informed. They need to immediately control the situation. They do not work alone, but cooperate with others for different tasks. For forestry protection, they work with two forest rangers, while the village committee member, responsible for the security, assists them in the cases of fighting and petty theft. All cases have to be reported in the administrative village meeting at the end of the year. In the interviews, the administrative leader mentioned that the obedience level is high. Most villagers obey the rules well, once

they decide to accept them. Forestry preservation is a good example to reflect the performance level of related rules.

Case 1: Forestry preservation

The former forest management system had loopholes, since part of the forest is for firewood use. In the name of lumbering firewood villagers cleared the forest and planted maize. In 1998, a new management system was introduced, which was a part of Dutch agro-forestry project. It was not an easy decision, since use rights were distributed to each household. Villagers had believed they had all land rights and did not want to submit the forest land. The resistance was strong, which challenged the implementation the organisational mechanisms and relevant regulations. Although the land belongs to each production group, the withdrawal activities have to be planned and managed in the scope of the administrative village. The village head communicated with the members of the village committee and his friends who were village representatives. Then he talked to other representatives. The discussion shows a kind of respect, and means the leader lets them share in the decision making. Although some might have different opinions, they tended to peacefully express the reasons. The leaders presented the facts to convince them. An initial plan was gradually generated based on an adequate discussion and compromise. Later, a village meeting was organised by the leader. After the proposal introduction, the village head emphasized that it was a part of the agro-forestry project, followed by a community development funding that aims to facilitate forestry protection. The controversy was not intense due to preparation before. In the end, the proposal was passed in the voting. Besides the supporters, the opponents kept silent and did not raise their hands against it. It meant they had a tendency to follow the proposal, although they would not become active promoters. The final decision had to be made after the confirmation of specific performance details discussed in the village meeting. There were three steps in the operation. The first one was to maintain the interest of each household to some extent. Some buffering zones of the forest were seriously damaged and difficult to recover. To facilitate the related performance, the use rights of the damaged forest land were reallocated to each household for cultivation use. The remaining forest is protected and managed by two rangers and the head of the production group. The next step was to make public the uniformity between collective and private interests. According to the new forest management system, farmers could obtain certain amounts of firewood every year. As the production group gained the use rights of the

forest again, the forest could be better protected. Finally, there was a larger supply of firewood for all villagers. The agricultural development plan, training courses and biogas tank construction as the sub-programs of the Dutch agro-forestry project were announced in the village to facilitate the promotion process. In the interview, the village head said 'Most villagers are rational, and with sufficient communication and education, they can understand our opinions and support us (Interview 35)'. In the meeting of the administrative village, promotion and monitoring were confirmed. All Communist Party members had to accept the idea and played a leading role. Village delegates and group heads went to each family to explain the system and persuade the villagers. The thoughts and feedback of the family heads were collected and reported to the village heads. If necessary, house visits could be repeated several times. When the situation matured, production group meetings were organised. Chief and vice village heads attended all meetings to steer the discussion. In the end, an agreement was achieved with the permission of most villagers. After the meeting, a series of house visits were performed to persuade a few opposed families. There was only a limited choice for these households, since most people had already agreed with the decision. Finally, all villagers accepted and the family heads signed the agreement.

In the new forest management system, rangers are major executors and have a big responsibility for the forest preservation. They are nominated by group leaders and confirmed in the village meetings. They sign a contract with the production groups to clarify the responsibilities and rights. The rangers are responsible for forestry protection and seedling management. They have no use rights but management rights. Without their permission, villagers cannot lumber firewood. The amount and location are also regulated by the rangers. If someone violates the rules, village head and rangers can penalize the violator. According to the diameter of wood, each inch costs at least 4 RMB. They have the right to raise the fines to a maximum of 40 RMB that. On the other hand, rangers will be financially punished with the minimum amount if they cannot catch the violator. The money is used for the compensation of forest damage. Each month, rangers inspect the forest with group leaders to assess the performance. Since the rangers try hard to fulfil the duty, the forest is generally well protected. The supply of firewood is sufficient and stable. The tension between environmental protection and agricultural development is reduced (XIONG, Q. and ZHU, M. 2006: 103). Based on the area, density, forestry type and products, a report was made by the project committee of Forest Conservation and Community Development. The remarkable effectiveness

was documented and praised, while the possible challenges were figured out for further improvement. The density of replanted timber was too high, but the management level for timber seedling and forestry can be enhanced by relevant training courses. The concept of biodiversity can also be promoted to attract more publicity (PROJECT INSPECTION REPORT 1999: 119).

The success of forestry preservation might provide possible implications for Fairtrade farmers' cooperatives at the local level. Relevant leaders in the village had less collective economic power, especially when the land-use rights were distributed to each family. Despite the land ownership being located at the level of production group, the promotion process was performed in the scope of the administrative village with the assistance of the local organisational mechanism. Besides the comprehensive support from outside, the heads had to use and accumulate their social capital for their management. Authority figures in the organisational mechanism were mobilized and invited to participate in the relevant negotiations and decision-making process to facilitate the promotion. The final decision had to be approved by each family head with a signature. While the village leaders worked as managers in Fairtrade certification, the specific tasks and requirements of Fairtrade had to be arranged in the scope of the village and legally regulated in the service contract.

Source: Based on FCCD Project Report 2006 and interviews 8, 9, 28, 29

7.2.2 Family

The term 'family' is used interchangeably with the term "household" in this study. It denotes '*a unit consisting of members related to each other by blood connection, marriage or adoption, and having a common budget and common property*' (LANG 1946: 64). The family unit is the basic socio-economic unit of the villagers' daily life. Its different types and division not only shape the personal interactions among the members of the household, but also influence their eco-social life and power allocation within the household.

7.2.2.1 Types of family

In Manggang, such basic socio-economic units appear in four different types of organisation, namely conjugal, extended, stem and rotating family. The conjugal family predominates in the village, while the rotating family is second. A conjugal family is frequently defined as a unit consisting of

husband, wife and unmarried children (GOODE 1964: 32). Since the children are still young, they do not have much influence in the household activities but follow the family decisions and rules. Land division is also not necessary for them. A productive estate can be effectively maintained in the family. Although his wife can freely express her opinion, the husband is usually the decision maker in the family. It is a stable form for household management and communication. However, in reality, 'broken' conjugal families are often found, in which one or both of the parents are absent either by death or divorce, or childless. A stem family is a unit that '*consists of parents, their unmarried children and one married son with wife and children*' (LANG 1946: 65). If there is more than one married son in the second generation, it can be called as 'an extended family'. An extended family refers to a household unit that consists of '*a man, his wife, two or more married sons and their wives and children*' (LANG 1946: 65). The extended family is rare, although still regarded by many older villagers as the ideal form. Due to the increase in family members, production competence is improved. Additional labour costs can be reduced, since there is less necessity to hire external migrant workers. The density of network is enhanced, although the linkage scope is mainly limited to the local level. However, complicated interaction often creates many family problems. Narrow personal distance and intensive interaction can possibly cause debates and conflicts. Although 'four generation in one house' is traditionally considered as an ideal one, parents will eventually split the family and divide the land to avoid possible conflicts after the children grow up and have their own families. When the family split was taken place, it usually becomes a rotating family. The word 'rotating' describes the pattern of family care for the parents. To accommodate them, the sons adopt a tradition in which the parents live with them on a time share basis (LI 2002). An example would be the custodian of an old couple with two married sons. The agreement is made that the two sons share the time to take care of the old parents. The parents live with the family of the eldest son for a period of time agreed upon, and then, in a rotating fashion, the parents stay with the second one for the same period of time. When the time sharing cycle finishes, it starts over again with the eldest son.

Each son is responsible not only for providing food and lodging to his parents while they stay with him, but also for furnishing them with expense allowance so the father can buy cigarettes and the like. If the old couple become ill while living with one of their sons, that son will pay for the medical expenses himself so long as the illness is not serious and its treatment not too costly. If the parents become too sick or suffer from a

chronic disease, the expenses will be shared by all sons. If the sons still live in their home village while it is their turn to have their parents to live in with them, the parents usually do not actually change their living quarters. Instead they live in their own house and simply have meals in their sons' homes. If one of the sons and his family move out of the village, he can ask one of his brothers to take care of the parents on his behalf and sends money to the brother in compensation for his expenses. If the parents wish, they can also accept the money and cook for themselves during the period of time when it is the migrant son's turn to take care of them. It is generally very rare in Manggang village, since only few villagers move out.

Case 2

Family head Mr. Wang had two married sons. Each household had its own stove and independent budget. Mr. Wang and his wife did not cook by themselves but rotated between two sons' households. Since the land was not divided, the sons and daughters-in-law still helped him with the cultivation. The profits earned from the sale of agricultural products were kept by Mr. Wang. He provided his two sons with money for monthly consumption. He was happy with the situation and tried to maintain the unification of family, although it became increasingly difficult. His second son was clever and good in farm management. His contribution was much higher than that of his brother. Therefore, he was not satisfied with the same monthly income and wanted to achieve further success with his own development plan. He complained and presented his wish for division. To relieve the stress, Mr. Wang built a new house for him in the village. Since then, the second son lived and ate with his wife and children apart from the rest of the family. Despite the settlement of the dispute, Mr. Wang knew that the family division was just a question of time. He did not want to do it and tried to postpone it as long as he could.

Source: based on interview 9 and 10.

7.2.2.2 Family division

Since the traditional Chinese inheritance rule requires that all sons have an equal share of the family property, this also implies that all sons have equal responsibility to take care their parents and to pay off family debts. Land is the most important estate for farmers. In the family division, land distribution has to be performed with three witnesses, including the group head. A contract can only be made in the county. It is difficult for farmers to accomplish the whole procedure. To avoid a possible property dispute, an

agreement is written with the signatures of the participators. Later, the village committee will confirm the land division agreement. When an affluent family splits, the parents usually withhold a small portion of their land or other form of property as a means of self-support. It is important for the parents to retain their financial independency and related authority. They can either hold the land and cultivate it by themselves or lease it and live off on the rent. A farmer stated: *'I divided my land into three parts. While my two sons have their share, I keep one. I do not rely on them and make my own decisions (Interview 15).'*' In some cases, the parents can give this portion of land to one of their sons in exchange for his promise to take care of them in their old age. They are often too old or sick to actively participate in the meetings at the village and production group level. They follow the arrangement of their children and support their household activities. For example, they cook and take care of their grandchildren. Their social network is gradually constrained in the family and production group. In Baihualing village, the wealth differentiation is small among the households. However, in a few families there are members who are drug addicts, very sick or disabled. Such families are often poor due to the costly medical expenses. When a poor family splits, it is difficult to live off the family land since the family estate is already small. There are limited choices on whether the parents should withhold some of the land for themselves or give a larger portion to one of their sons. Therefore, in a poor peasant family, the parents usually let their sons divide all the land and property equally and keep nothing for themselves. They give up the authority in the family after the land division. The dependency level is obviously increased.

Once the property has been divided, the fairest way to support the parents is to take turns so that none of children feels unduly overburdened. The rotation to live with their children works well for the aged and retired parents if they cannot maintain an extended family. The parents do not have to work as hard as they would if they withheld a piece of land and cultivated it by themselves. The parents can also avoid the situation of staying with one child for too long and becoming too dependent on him and causing family problems. As one of the 'rotating parents' pointed out to me, 'by rotating among my two sons and going to each of their home for meals in a short period of time, we keep our independence and maintain a good family relationship'. Each child does not feel too attached and does not have to worry too much about getting bored with us'. In some cases, the rotating parent-sitting even connects to the diet of the son's household. Usually the family with parents around serves a better quality of food;

either because the son tries to show his love and care to his parents or he does not want to be criticized for mistreating his parents by providing a skimpy diet. In other words, when the parents decide to be taken care of in rotation, it seems that they try to maximize their relationship with all of their sons by equally dividing the inheritance among the sons. Thus this avoids any misconception of having a special favour or preference on any one of their sons. By limiting the time the parents live with each son, the chances of household problems are reduced, especially conflicts between mother and daughter-in-law. As pointed out by GOODE (1964: 44), '*the various forms of the household have a number of implications for family interaction*'.

Case 3

Mr. Liang had two married sons. He had already divided his land and family into three parts. Each one was in charge of his household's land and income. Mr. Liang and his wife cooked and lived by themselves. His sons gave them some money or basic goods every month. Other neighbours admired the filial respect of his sons and praised Liang's family education. He was happy about it. He had certain superiority, since he was economically independent. He did not ask for the support, if the sons occasionally forgot. In the interview, he was proud of his self-support decision with the statement 'I don't rely on them; I use my own hands to feed myself as always' (Interview 10). However, he was getting older. In 2012, he had to retire from farm work. Not like other villagers, he did not participate in the rotation system and share his own land equally with his two sons. His wife did not like her first daughter-in-law. To avoid further conflicts and maintain his reputation, he decided to live and eat with the household of his second son. To compensate their daily consumption, Mr. Liang's own part of the land belonged to his second son.

7.2.2.3 The status of women

Baihualing administrative village is still a male-dominant society, although the constitution gives equal rights for women (CONSTITUTION OF THE PEOPLE'S REPUBLIC OF CHINA 2004). For the application of Fairtrade certification, which includes non-discrimination principles, difficulties might arise with regard to the status of women. However, it is necessary to understand the phenomena from the aspects of tradition, change and progress. In group discussions and interviews, the situation of women was explored. Some older women were reluctant to talk about their past, while the young generation tended to present their own opinions with certain

openness. Different questions were asked. For example, *'Which would you like to be, a boy or a girl?'* *'Of course, a boy (Interview 11)'* answered the women unanimously without hesitation. *'You have been so busy working both inside and outside. Do you have any complaints?'* *'There is no use complaining. It is my fate to be a girl. I hope that my children can have a better life than mine (Interview 11).'* Such cultural values support local norms and the relevant governance systems. An active movement of gender equality cannot be observed in the village. There is sufficient space for the improvement of women's collective action at the local level. However, women like to communicate with each other and share information in the production group. In daily chatting, certain complaints could be easily found:

'My husband always says that I do not know how to earn money. Every time I ask for money to go to the doctor or to make new clothes, he is so stingy. I could go outside to try my luck. I heard some migrant workers earned a lot of money in the coastal cities. But he did not want me to do that and kept me at home. Next time if he gets on my nerves, I will leave the house and show him that I have the ability to earn money.' (Interview 26)

'My son loves his wife too much and forgets me. He treats her much better than me and gives her pocket money. I work so hard at home, and yet he does not even give me a cent' (Interview 29)

'My life is miserable! My husband does nothing but gambling. I have to earn money to raise the children. I was very pretty when I married into the village. Now, look! You can hardly believe that I am only in my thirties.' (Interview 29)

No matter what type of family a woman belongs to, she is obliged to help her family before marriage. Traditional habits and cultural notions provide the basis for personal orientation in local society. Like the daughter-in-laws, the girls have to do different kinds of work, such as cooking, feeding pigs and chickens, farm work and chopping wood. If they have 'leisure' time to work as a hired farmer, they earned 40% less wages than the men and have to hand in the money to the family leader. When an obedient daughter gets married, her financial contribution to the family head, the value of her dowry, usually exceeds the bride price. A girl with a large dowry is respected by her husband's family. Marriage without a dowry is a way of punishing a disobedient daughter. After marrying into a new family, the bride's economic status can remain the same. She is obliged to hand over her income to her father-in-law. After her husband becomes the family head, her income will come under his authority. It is not easy for a wife to obtain economic autonomy.

Although the law of succession states that males and females in the family share equal rights, the traditional practice of favouring males still prevails, at least in the rural areas of Yunnan (LAW OF SUCCESSION OF THE PEOPLE'S REPUBLIC OF CHINA 1985). A dowry can be possibly considered as a type of compensation or a share of her biological family's estate (CHEN 1977: 132-133). However a daughter's share, received in the form of a dowry, is usually smaller than the inheritance of her brothers.

Traditional culture emphasizes women's obedience and dependency in the family. Parents support their daughter to go to school, but do not have high expectations for her academic score and education level. In most parents' minds, the daughter will eventually marry, move out of the house and become a member of another family. It is not economically wise for parents to pay much attention to their daughter's education because there is no material return on the investment. Women also 'humbly' accept this tradition and treatment. There is no specific women association and related funding in the village and production group. Although the status of women is low in local society, changes are taking place. In Baihualing administrative village, there was already a female natural village leader. Many young women have the courage to express their opinions in family meetings. The concept of gender equality is also disseminated in various development projects. The progress is obvious. However, for middle-aged and old people, the man is always the director of house, typified by an old male family leader statement: *'a female-dominant situation often displays problems, perhaps showing that the husband is maimed or a drug addict'* (Interview 20).

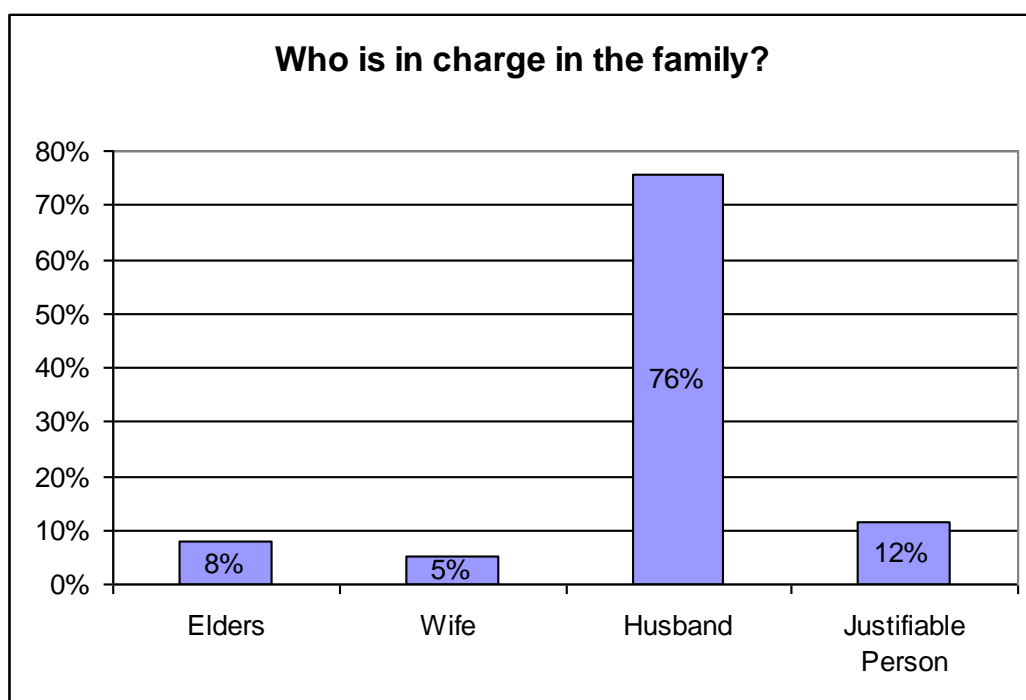
7.2.2.4 Power allocation in the family

Gender conditions and traditional customs are directly linked with the power distribution and governance arrangement in the family. Personal perceptions, expectations and duties are influenced by the relevant value system. It can be shown by the inheritance and family division related to family wealth and power distribution. It can also affect the handling of family members and their obedience level. There are two dimensions power allocation in the family, namely between different genders and among different ages. In the rural areas, boys and girls have different positions and experiences within the family development. A boy can be born into an extended family living and eating together with his grandparents, parents, uncles and aunts. When his grandfather retires or passes away, the family divides into several units. His father becomes the head of his own family

unit. After marriage and the birth of children, the boy eventually obtains the control of the family's economy. The family division is the turning point of an official power transfer. The elderly no longer function as an independent economic unit, i.e., they do not have an independent budget any sizeable property or income. Even some elderly people can keep a piece of land to maintain their independency, but their influence on other family members is greatly reduced. When they live with their son's family, they are expected to help with various family tasks. If the father is still strong enough, he may work in the field. The mother may help in the kitchen or look after the grandchildren. It frees the daughter-in-law from her household duties and enables her to work in the field if she is needed, or she can shop or do other activities that she usually is not able to do. Many housewives offer themselves as day labourers or work for other villagers on a labour exchange basis only when their parents-in-law are "eating" with them, or, to be more specific, only when someone replaces them in doing the housework.

The power allocation can be further present in the decision-making process. The status, role and characteristics of participants affect relevant performance and obedience level, while the cultural notion is partially reflected in the management customs of the family.

Figure 41: Family power allocation



Source: Author (2009)

It is clear that the husband is in charge of the family. If the 8% of the elders are also included, the percentage can reach 84% (figure 41). Only 5% of the families in Manggang natural village are controlled by the wife. Villagers stated that in these families husbands are often either disabled, drug addicts or in prison. Their wives have to make decisions and take charge of the family, while their financial situation is challenged. Therefore, a female controlled family is often considered as a sign of wane. *'Normally, the man is the master of family. In the village, agreements or contracts have to be signed by family head on behalf of his family members'*, stated by village leader (Interview 21). With corresponding responsibilities, the family head makes the short-term plans and sets goals to reduce possible risks. This was also described in the study of HE, X. (2003) showing that the utilitarian characteristic of farmers is significant in their decision-making process. In a big family with three generations, the situation might be more complicated. If the decision causes finance losses for the family, the leadership of the family head can be weakened to some extent. *'In several cases it led even to a family division', as mentioned by an old farmer (Interview 12)*. Therefore, the discussion among family members, at least among males, plays an important role in the process of family decision making. Especially when a man is over thirty years old, his opinion becomes increasingly valuable. It is well known that each family makes its own final decision and takes the related responsibility. It is always possible to find several opponent families, although the influence from outside clearly exists. As a family head said, *'We are free to choose the cultivation variety. Nobody knows who will earn more money in the end'* (Interview 20).

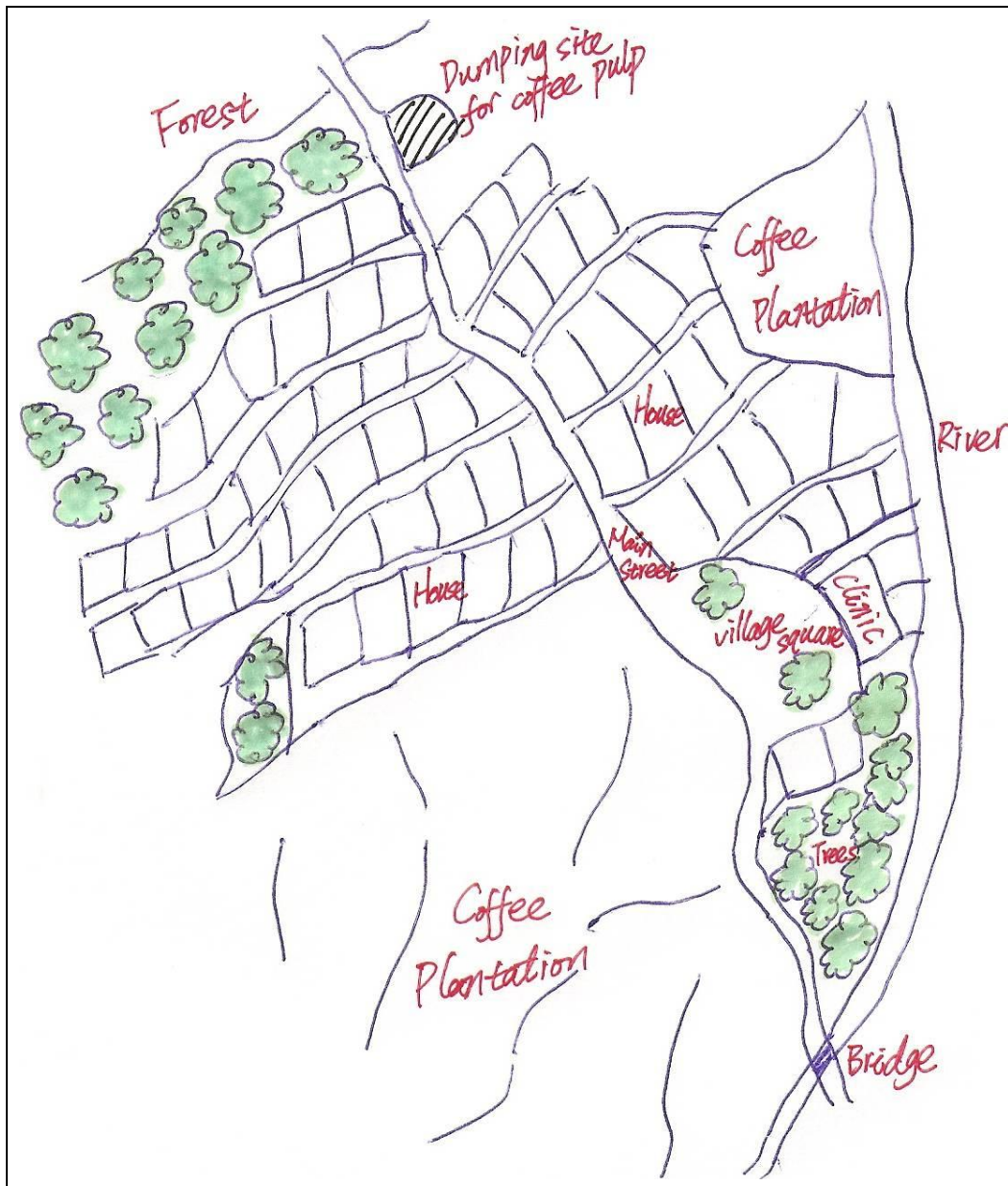
The decision-making process at the level of family has a close linkage with the organisational mechanism in the village, which concentrates on relevant procedures and structures in the governance system available for the agricultural development. After a village meeting, the news is rapidly spread in the production group. Within few days, individual household meetings are organised among family members. No outsider is invited. Family members are free to express their opinions and exchange their information. After the discussion, the family head makes the final decision for the whole household. It is possible to have several family meetings to find a consensus. However, the primary decision is made before the group meeting. The head of each family usually attends the meeting on behalf of the whole family. Although others can participate, only family heads can participate in the discussion in the meeting. If the household head cannot come for various reasons, one of the family members can represent him to take the message. It usually happens when the heads support the agreement.

The representative cannot join in the discussion but can sign the agreement. The signature in the agreement has to be the name of the family head. Otherwise it is invalid. In the group discussion with village and group leaders, the importance of the signature of the family head was also mentioned as the basis of their governance. As an operational unit, the family can play a significant role in the establishment of Fairtrade farmers' groups. The high level of performance efficiency and decision obedience presents the features of homogenous group and possibly benefits the promotion of Fairtrade certification. With the consideration of power allocation and management in the family, relevant representatives have to be chosen from the family heads to effectively contribute to the stabilization of the Fairtrade farmers' cooperative.

7.2.3 Production group

Here, production group refers to natural village, a traditional definition that focuses on the natural and spontaneous existence of village. It has a clear geographic boundary. For example, Manggang natural village is bordered by river, forest and coffee plantation. A production group is a kind of administrative classification, based on the population size. It originates from Mao's communist commune movement. From empirical experiences, the production group was proved and confirmed to be a basic administrative collective unit for efficient resource allocation and effective management of farmers' daily activities (ZHANG, L. 2005: 4-7). Since the 1980s, economic reforms have been gradually performed in the whole of China. However, the arrangement of production groups is maintained in the institutional governance system. The production group is not definitely as big as the natural village. However, in Yunnan, production group usually refers to natural village (HE, X. 2003: 25-28). The research village is a typical sample with 416 persons, 104 households and 207 hectares land (FCCD PROJECT REPORT 2006: 96). The administrative leader of the production group is the head of the natural village. Farmers live in the village. Their houses are built side by side. The village is surrounded by cultivation land and forest (Figure 42). Due to the limited space, farmers have intensive interactions that obviously affect their social life and local governance system.

Figure 42: The map of Manggang natural village



Source: Author (2009) illustration after transect walk

7.2.3.1 Production group leaders

Production group leaders are directly elected by farmers in the villagers meeting. The leader normally comes from a strong economic background and has a good reputation. His successful experience and superior management ability wins his villagers' votes. His financial resources can support him to help others and to expand his social network. A good leader has enough capabilities and good connections to handle public affairs and to balance the different interests among stakeholders, though he has little power on collective estate. In the group discussions and interviews,

villagers mentioned that the development level in various production groups is very different. The governance ability of a leader is the main reason. If the group head can manage farmers in an efficient manner, his group is usually wealthier. Manggang natural village is a typical sample, with a farmer stating: *'There is good management and development in my village; I have confidence in the leader'* (Interview 13).

Like the village leader, the office term is three years. The group election is normally held a few days after the village election. Since there are only few competent candidates in the group, the head is often re-elected. The group head is respected by other group members. This motivates him to serve the other farmers. As a group leader said *'It is an honour to serve the villagers, since they trust in me'* (Interview 21). The linkage between group head and members is close and intensive, since he and his family live and farm in the production group. As the agent of group members, he needs to protect their interests and reflect their opinions. These can probably be against the principle of orders or proposals transferred from the village meeting. The group head is in charge of the policy/proposal performance and related monitoring. Due to the bridging function and possible paradox, it is a difficult position with a lot of stress. If the head cannot find a compromise, he can possibly lose his reputation and influence in the group. On the other hand, economic reform brings new thoughts and challenges to the local traditional society. In the interviews, the villagers, especially the young generation, tended to evaluate the activities of group leaders based on economic input and outcome. While reputation and respect cannot be quantified by monetary benefit, the leaders can possibly have economic loss. Due to village tasks, his own farming work can be delayed. Although the group head has a monthly subsidy of 60 RMB, it cannot cover the expenses caused by the job. *'I have economic strength to some extent; otherwise it would be difficult to fulfil the duties of group head'*, mentioned by a group leader (Interview 1). The job is getting less attractive. Capable persons tend to leave the competition for the position (HE, X. 2003: 163). Facing the challenges, the organisational mechanism can still mobilize the people to contribute to their community. In the latest election, for instance, an elected group head rejected his nomination and complained in the village meeting. His excuses were lack of capacity and opposition of his family. Convincing arguments were rapidly presented to persuade him, based on a high level of transparency and information about his character, capacity and family situation. *'Villagers trust in you, why you do not trust yourself. You are a man and the head in the family. Once you decide, what can the other family members say?'*, said the chief village leader (Interview 35). The elected

head could not defend his flimsy excuses and promised to reconsider the nomination. Later, house visits by village heads and representatives intensified the pressure. In the end, he accepted the result of election, although his family members still were against it. In the interview, the village head confirmed the influence of the organisational mechanism, while he wished for more financial support for key figures to facilitate the community management.

Case 4: Mr. Li, head of production group

Mr. Li is fifty-five years old and has three children (two sons and one daughter). He has been the head of Manggang production group and its senior association for two years. He used to be the head of administrative village and a member of the Chinese Communist Party. Due to his dissatisfaction with the unethical behavior of some communist members, he withdrew himself from Chinese Communist Party. He said: 'If I am a communist member, I will keep the party spirit. If my action is without merit and good consciousness, I prefer to quit.' Because of his fairness and a strong sense of justice, he is a highly respected man. He introduced and promoted the idea of the coffee plantation in the village, which was first not well accepted by villagers. Only some villagers followed him and planted coffee trees in the beginning. A few years after his introduction, the coffee plantation became the mainstay economy in the village and brings the most of the income to villagers. A few years later, he started to introduce citrus to the village because of the higher price at the local market. To learn planting skills, he organised a team to visit Bingchuan County about 300 kms away, where the area is famous for growing citrus. The citrus cultivation then expanded rapidly, although it can only be planted in the wet lands close to the river. To increase the sale price and marketing channels of citrus, he plans to organize an association and to create and market their own brand. In the village he has a good reputation. He often supports others who need help with his own money. Some villagers, especially some elders, encourage him to rejoin the community party and run for the next election in the administrative village. He rejected the advice. One of his sons is a drug addict. The drug consumption causes a lot of problems in the family. Due to his family situation, he has no time and energy for the position of village head. However he still wants to work as group head. For him it is not just a job but recognition and respect by the villagers.

Source: Based on Interviews 19, 20 and 21

The leaders of the production group can play an important role in Fairtrade certification. They can promote the decisions, made in village meetings, and implement relevant Fairtrade programs or standards. They live with other group members and know them well. With sufficient information, the group heads are competent for monitoring and evaluation of specific performance. Due to the remarkable respect and recognition, group members also accept their coordination and management. The participation of group leaders can greatly increase performance efficiency and decision effectiveness in the Fairtrade farmers' cooperative.

7.2.3.2 Group representatives

Since 1978, the Household Responsibility System (HRS) has brought the land-use rights to each rural household by offering farmers more freedom to select crops and to market surplus production. Gradually, less collective economic resources are controlled by production group leaders. Some villagers can obtain economical, political and cultural resources by themselves. Their independence gives them enough power and confidence to express their opinions openly and win respect from other villagers. They gradually become production group representatives and are officially confirmed in an election (Figure 43). Villagers hope these representatives can supervise group heads and present their opinions to the heads. There are generally three kinds of group representatives. In the first one, the representatives are the villagers who used to be administrative heads or members of the Chinese Communist Party. They are familiar with the situation in the village and previously worked with the county government officials. They usually are outspoken and straight forward in public affairs in the production group meeting. Production group heads have to respect them.

The persons with a 'specialty' belong to the second group. Among this group, some are friends with county officials or have good connections. Some have special technical skills or experience. Some are willing to participate in public events and fight for their own interests. This group of people tends to be tougher and stands by its principles in dealing with the leaders. Nobody wants to offend them. The third group of representatives comprises the villagers from a big family clan. They have many family members and obtain a collective power in the name of their clan.

Due to the multi-ethnic characteristics, there is no large family clan in the studied village. The persons from the first two groups become villagers' representatives. They represent the interests of production groups, supervise

and review the work of the leaders. On the other hand, the heads try to communicate and cooperate with the representatives to consolidate their power. If the representatives accept these leaders, villagers will follow and accept their governance. Political awareness, administrative order, law and legal enforcement have a limited function in rural areas. Governance is usually achieved by an unofficial force based on customs and traditions, personal persuasion and other non-official rules (JIN, T. 2008). The cooperation between them is especially important for the organisational mechanism. After the village meeting, representatives and group leaders return with the information to their natural villages. They spread the news together with their own opinions in order to efficiently influence many farmers. To better maintain the cooperation with representatives, it is possible that they meet often to assess the performance situation. Group leaders invite them to take part in their discussions or let them share a part of their decision making. Representatives normally appreciate the leaders' good intentions and accept the offer so they can better express their opinions and protect their interests. Such cooperation benefits both sides. It helps to strengthen the leaders' reputation and influence in the village.

Consistent cooperation is crucial to the performance of a policy. If opinions are not unanimous, the operation effect is obviously weakened. It is possible that some representatives or group leaders do not completely agree with the decision made in the village meeting. In the promotion and performance stage, they prefer to keep a distance and limit their personal influence. The intensity and strength of promotion is reduced in the production group. Farmers are realistic and conservative. The potential of a proposal is not proven in reality. Uncertainty brings more risks, which is not liked by the villagers. Without the strong pressure caused by the cooperation, some families tend to be hesitant to accept the development plan. In the production group meeting, a controversy can hardly be avoided. It can be difficult to finally achieve an agreement among all households.

Figure 43: The group leader in discussion with group representatives



Source: Author (2009)

Case 5: The nomination of production group representative

Village representatives can normally finish their term. If they want to quit, they will not participate in the next election. A former representative occasionally wanted to resign early, since he was sick for long time. The head of production group could not convince him to change his mind and had to organize the nomination. The news of the resignation was well known in the village. There were only two competent candidates. Mr. Zhang was one of them. He is a capable man in the middle-aged group. Due to his successful transportation business, he owns a minivan and is relative wealthy. Some villagers believe in his ability and hope he can contribute to the production group. One evening, the group head visited him and asked him to be a representative. Mr. Zhang did not want to take the job, since he has his transportation business and no time for other duties. However, his wife wanted him to become a representative and gave an ambiguous statement. Later, the head visited another candidate. The villager indirectly expressed his willingness, although he said that Mr. Zhang would probably be the better one. After the conversation, the head took him to Zhang's house and let them discuss the issue. A humble discussion started. Despite this, there was no final result; the head had already a clear mind, and stated: 'Mr. Zhang is the candidate, not his wife' (Interview 35). The next night the selection was made. In the beginning, the group leader mentioned the humble discussion between the two candidates. Then he said: 'Since Mr. Zhang does not have time for the job, I think the other one is suitable (Interview 35)'. The previous representative stood up and agreed. Other villagers immediately followed the advice considering the current situation. Without conflict or surprise, the other candidate was selected. The new group representative is respected and accepted by the villagers. While the process is officially democratic, the result is largely influenced by several

authority figures. It avoids a vehement campaign between two candidates and takes into consideration their mood swings. As candidates, they have influence and reputation in the production group. They have friends, relatives and supporters. They represent not only themselves but also the group behind them. A crash between two candidates can cause conflicts between two groups and disturb the performance effectiveness of the local governance system. 'The crucial part of the nomination is the maintenance of the harmony that can facilitate the future work of the successor (Interview 36)', stated the group head. Despite certain anthropogenic factors, the operational custom can probably provide constructive references for the improvement of performance effectiveness and efficiency in Fairtrade cooperatives.

Source: Based on Interviews 35 and 36

Group representatives are important coordinators and connectors in the production group. They can have their contribution in the Fairtrade farmers' cooperative. Villagers know their competence and personality well. Based on the high level of acquaintance and prestige, they can convince other group members. Their opinions have a strong impact. With their support, the members' obedience and performance effectiveness can be largely improved in a Fairtrade farmers' cooperative. The cooperative also is well integrated with local customs and governance system.

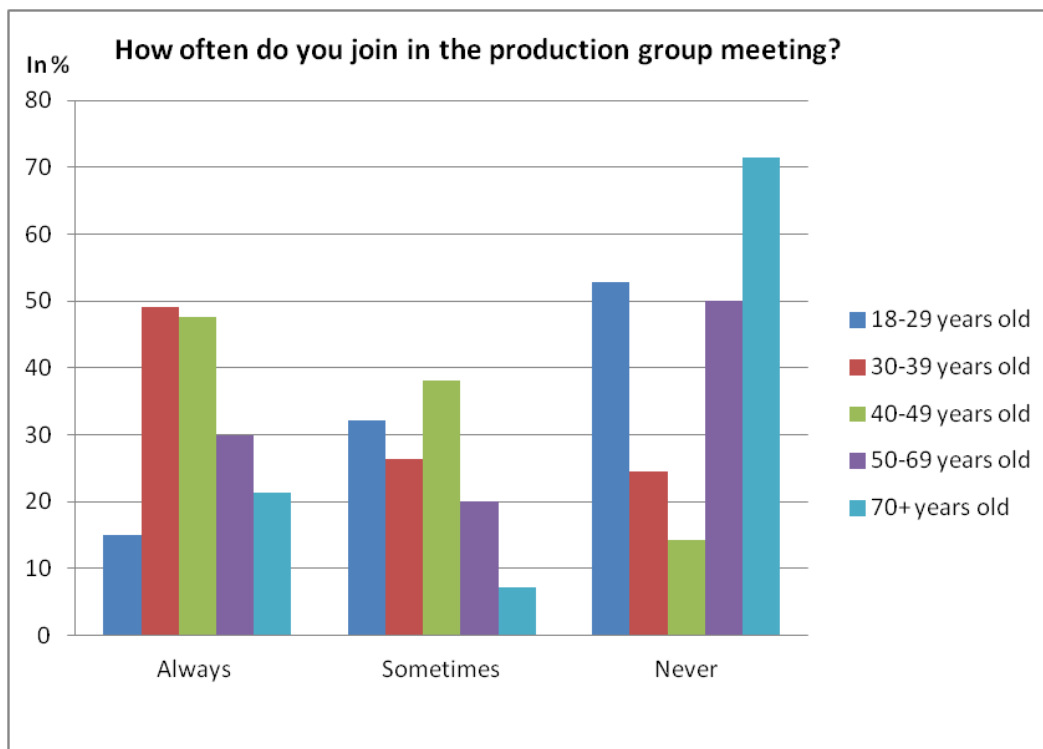
7.2.3.3 Production group meeting

Since the land is distributed to each household, the production group itself is not a meaningful economic unit. However relevant leaders use local social capital to achieve real execution power. Before the group meeting, previous negotiations and house visits provide opportunities to discuss and finalize the decisions on proposals. The reliability and leadership capacity of the operators play an important role in the promotion process. Despite this, villagers have no obligation to follow the proposal made in the village meeting, and the heads, representatives and their supporters can create pressure to promote relevant proposals (HE, X. 2003: 163). It means not only respect for heads and representatives, but also confidence in their leadership capacity. Their successful history and reputation increase the influence of their opinions (FEI, X. 2007: 9-10). A rejection of their suggestions can possibly offend them and their supporters. While the beneficial economic prospect is often highlighted, concrete technique details have no priority in the decision-making process for the farmers. In the talks about coffee development, almost no villager mentioned the

influence of possible technical challenges, such as coffee rust disease and quality improvement. The shortage of knowledge about phytomedicine and cup quality does not attract enough attention. Farmers focus on the economic potential and want to improve their livelihoods as soon as possible. They tend to believe in the judgement of leaders and representatives and rely on their operational competence. On the other hand, the institutional background and economic power of project initiators determine farmers' confidence and recognition. For instance, some respondents favored cooperation with the coffee institute for the possible Fairtrade certification due to its official status. Others are convinced by private enterprise, since it has strong economic strength. In the family meetings, members' opinions are freely exchanged, and the decisions are made on behalf of each family. The presence in the group meeting is not very meaningful for each family member. The family is usually represented by its head.

In the survey, a question about participation in production group meetings was posed (Figure 44). Many young villagers do not join in the meetings, while the participation of the 30- and 40-year olds is high. The over 70-year olds are not interested in going to the meetings. This is also the case with the under 30-year olds. When man enters his fifties or sixties, he will slowly transfer his power to the next generation and does not need to be at the meetings any more. The group meetings are important, since community issues are officially decided and confirmed in the meeting. Heads of the families usually attend these meetings, and it seems to be an occasion reserved for the elite and family heads in the production group.

Figure 44: Participation in production group meetings



Source: Author (2009)

Based on the interviews (2009) with several family and group heads in Manggang and Dayutang production groups, the scene of meeting can be illustrated as follows¹⁷. There is no fixed location for the meeting, while the time is always 8 o'clock in the evening. No food is provided, so it is held after dinner. Participators stand or sit around in small groups. The head of the production group transmits related policy and reports events in the village. Some villagers chat with each other, while some joke with others. A few play with dogs. Occasionally babies cry and make a loud noise. To manage the meeting, the head has to remind the participants several times to concentrate. However, the meeting becomes serious when it is time for the discussion and agreements. A respectful group leader can guide the direction of discussion. Some villagers may disagree with the leader's judgement. The disagreement can be reflected in the person's face or hidden in his heart. The villagers do not officially present their counter opinions. The head knows well whose interest is benefited or not. He usually has additional advice to balance the different stakeholders. On this occasion, village representatives show their support. Decisions can smoothly and rapidly be made, although there is no enforcement of

administrative sanctions to the families who disagree, especially for proposals. At the end of the meeting, family heads raise their hands if they support the issue. An agreement is written with the signature and stamp of the family heads.

Meetings can be led in another way. Tensions can be recognized before the meeting starts. Some villagers keep together and have a mental distance to the group leader. They already discuss relevant information and share their opinions before the meeting. In the discussion part, someone indicates that each family should plan based on its own economic interests. Some participants then suggest using ballot paper instead of raising hands. Some village representatives also consider this as a better way to obtain a final decision. To demonstrate fairness and justice, the group head accepts their idea. Differences might exist and can hardly be solved in a short time. A few days later, the head of production group will visit the families. But he has no power to force people to change their minds. Each family makes its own decision and takes the related responsibility. Performance is still difficult, since those who lost in the vote can unofficially oppose the decision. Although home visits by the head of natural village is a possible way to reconcile the differences, the decisions in a meeting sometimes have to be implemented with resistance. If the production group leader can show his fairness and authority, there are fewer intrigues. Some villagers are dissatisfied, but the majority does not veto the election results. In contrast, the majority will not obey orders if the leader is biased for his relatives and friends or he makes too many concessions with certain village representatives. He is then in an embarrassing situation and suffers from gossip. Villagers do not cooperate with him. His once friendly neighbours can become strange. His wife will probably complain about his job. Therefore, it is important to protect the prestige of the group head. Although the specific operation can be adjusted according to traditional customs and practices, a violator of the decision made in the group meeting has to be properly punished. Hesitation and vagueness can damage the group governance. Later, some smart leaders can talk with the violator to obtain his understanding. Fairtrade certification can probably benefit from the governance system and customs. Once the decision about Fairtrade is made in a meeting, the performance and related motivation can be ensured to some extent. Group leaders tend to pull the certification through, not only

¹⁷ This is not the description about a specific meeting in the village, but an illustration about a normal situation in a meeting.

for its contribution to the livelihoods of the villagers and standards, but also for their authority in the context of institutional status.

7.2.3.4 Conflict resolution

The relationship between neighbors in Manggang is good. Villagers respect each other and stay close. If there is a dispute in the natural village, production group leaders can handle it. Since many quarrels in the group originate from families, the normal way to dissolve a conflict is in the order: family meeting, production group meeting, administrative village meeting, county government. The head of the production group usually participates in the family meeting. Administrative leaders who are family relatives will also attend the meeting. Disputes can usually be resolved at the level of the production group. The production group is not only a collective unit for productive activities, but also a symbiotic community. To achieve sustainable development, a Fairtrade farmers' cooperative needs to integrate into local society and obtain the support of the governance system. The mechanism of conflict resolution in the production group can provide constructive implications for an effective management of the Fairtrade cooperative. Relevant key persons can also have their contribution in the cooperative.

Case 6: Mrs. Wang, housewife

Although she did not mention the problems in the village in the questionnaire and focus group discussion, a researcher¹⁸ from the local coffee institute recognized her vague attitude and had a personal interview with her. After an exchange of pleasantries, she revealed the conflict with her neighbours. Their pig pens are built next to her yard. The smell is terrible. She quarrelled with them several times. In the end, the production group leader had a meeting with both families. Some village representatives also participated. In the meeting, the importance of harmony was emphasized again. Mrs. Wang's husband said: 'It is only a tiny conflict among a few women. Women like such stuff. As a man, it does not bother me' (Interview 30). A decision was negotiated in the meeting, namely that the neighbour should keep the pig pens clean. Mrs. Wang considered that her neighbour had a big advantage and complained that her husband did not protect their family interest. However, she could not change the

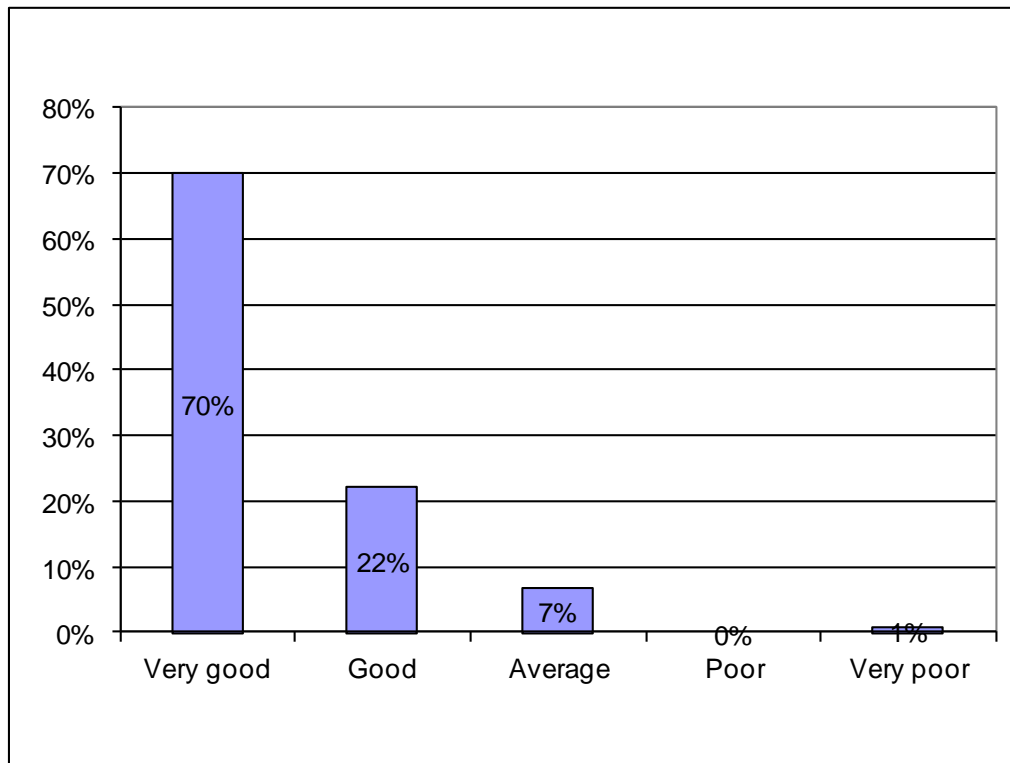
¹⁸ The researcher was a project assistant and conducted the survey in the village. To obtain more details, he would conduct an interview to ask further questions after the survey.

decision and had to accept it. An agreement can be achieved with low cost in a limited time, as the authority figures in the community governance system join in the conflict resolution. A widely accepted solution cannot always be obtained. Different participants might have their various personal judgements about the result. However, the process proves the representativeness of family head and the influence of certain pivotal persons in the community, which can facilitate the improvement of the performance effectiveness and efficiency at local level.

At the beginning of the land distribution, there were several cases about land. Now the land has been distributed among the households. There has not been any case in the village for a long time. There are normally no property disputes. The local governance system is adequate to solve the relevant challenges and maintains the harmony in the village. Nowadays, common conflict is fights between drunken persons. Most of them belong to young generation. A young farmer stated: *‘My parents think always too much and search for harmony; I do not understand (Interview 23): Sometimes man has to protect his own interests.’* With easy access to alcohol, there are quarrels or small fights in the village. Although they are not big group fights and do not cause serious social problems, group heads will quickly come to calm the fighters down. If necessary, the member of the village committee who is in charge of security will also arrive to appease the participators. He has had a training course about relevant laws and regulations provided by the local police station. He can effectively control the situation with his professional knowledge. If the fight still cannot be suppressed, the administrative village head will come to solve the conflicts. *‘The most important thing is to cool the situation down. When the drunken persons wake up, they become rational again’ (Interview 36 and 37),* mentioned the village head in Baihualing. Injured person will be immediately transported to the local hospital. Related medical expenses are first paid by him or his family. If there is not enough money, the village head will negotiate with the hospital and guarantee payment in the name of administrative village. The final payment is made, when the person leaves the hospital. The village head, group leader and committee member, and all participators in the fight will come together to present the whole story. An evaluation will be made to identify who was responsible. The persons held directly responsible compensate for the relevant costs. They are also fined several hundred RMB. All money has to be submitted to the village committee that is in charge of the relevant distribution. If someone dies in the fight, the group head has to immediately report this to local police station. The relevant authorities will directly intervene in the affair. The

involvement of village head and committee member is not necessary. However, there was no such case in Baihualing village in the last 30 years. Most conflicts are successfully solved at the local level.

Figure 45: Neighbour relationship survey in 2009



Source: Author (2009)

It became clear that most of the group members recognize the good neighbour relationship, although the conflicts are difficult to be avoided in daily life (figure 45). Relevant compromise processes reflect not only the customs and power allocation, but traditional values and women status. This was also observed by FEI, X. (2007) from an anthropological view, when he analyzed village interrelationships. The obedience level of villagers and way of handling matters also illustrates the effectiveness of related management systems, despite the fact that it is usually limited in the scope of the production group (CHAO, J. 2004). Based on the strong organisational mechanism, extensive cooperation can be expected for a net collective benefit (XIONG W. 2008). To further explore local communities, collective action is going to be reported in the next sector.

7.3 Collective action

Collective action is a result of trust and shared norms. It can derive from another perspective to prove the situation of trust and norms. Related

operational mechanisms can also benefit the identification of homogenous groups and federation platforms. Although collective action is a broad concept, it is explained by the analysis of public services, festival help and the desire to cooperate for the research purpose.

7.3.1 Public services

Like other decisions, public services are promoted by the organisational mechanism. Acquaintance and social pressure are the two main factors in the promotion process. Since they are related to labour input and financial investment, a sound arrangement determines the outcome. A public service is a united suggestion of group and village leaders. The suggestion is not a random opinion, but a consideration based on sufficient information. In the group, farmers know each other well. Agricultural practices are also similar in different families. Based on productivity and sale price, each family's annual income can be easily estimated. It is almost impossible to conceal the economic capacity of a household. Performance criteria are first drawn up by the group head based on the specific socio-economic situation in the production group. Later, this is discussed in the village meeting. More details will be figured out by group heads, village leaders and villager representatives. Finally, these will be presented in the production group meeting. Although a proposal is made with comprehensive consideration, it might be difficult for several poor or small households to achieve the contribution requirements. Their family heads can oppose the plan and express their own thoughts in the group meeting. *'It is a normal situation and can optimize a simple plan to some extent'* (Interview 36 and 42), as mentioned by some group heads. It is hard to become a free-rider or liar due to the dense linkage and adequate information flow in the community. All family heads attend the meeting and know the situation well, they have to tell the truth to convince others. In a transparent situation, social pressure is generated with the attention of powerful figures in the village. If the reasons are credible, the service schedule can be adjusted with the permission of other family heads. It does not take a long time to achieve a final agreement in a transparent discussion. Sound management efficiently facilitates the performance. With daily observations by the villagers, everyone obeys the decisions made in the meeting of the production group. If someone behaves incorrectly, the news will be rapidly spread in the village. The rest of the group members will chatter and gossip. They might even break the tie with the offender and treat him disrespectfully. In the group discussion with relevant group leaders, the effectiveness of the house visit is confirmed. As a group head said: *'The existence of a free-rider is not just a challenge for*

my leadership but a danger for the whole public project. Everybody watches, and nobody will agree with such violation (Interview 35 and 37)'. In a transparent community environment, it is difficult for violators to find an excuse. The direct personal communication with prestige leaders creates strong pressure and forces a person to declare his position. The group heads will keep their bottom line to protect their authority and reputation in the village. If necessary, they will make repeated house visits. Meanwhile, his whole family is under the stress of public opinion, since the workload of public services is distributed to each household. A person works in the name of the family. His family members will feel gradually embarrassed and complain. Nobody can stand the stress from inside and outside. Therefore, such public pressure is effective and works well. As a group head said: 'There are rarely violations in the village, so no special punishment is enforced' (Interview 37). Road construction is a typical sample. The government involvement in building infrastructure and other public services is mostly limited to towns or inner-cities. The rural area has to depend on itself. Since 1978, the production group has built a 9-kms road to connect the traffic from the foot of GaoLiGong Mountain to the natural village. An expressway was also built to the village administrative office. To finish the constructions, families in the village were organised and work together. Each household is responsible for building a certain part of the road. To coordinate and manage the infrastructure projects, the leaders of the production group had to invest a lot of time, energy and money. They often use their own resources to facilitate the projects. The heads of production group are well respected, since they contribute to the well-being of others in addition to their own. The village head in Manggang said: 'In the production group, most farmers listen to me. My words have influence' (Interview 40, 41 and 42). The benefit of public infrastructure is well recognized by all villagers, although the collective decision was made with strong social pressure. Today villagers voluntarily participate in the maintenance work. Each labour force in the village commits five days of volunteer work per year to perform public services. The experience can possibly provide constructive clues for Fairtrade certification. Villagers might not accept Fairtrade at the beginning. Certain effort and pressure seem to be necessary to convince villagers and promote the process. Once they realize the advantages of Fairtrade, a virtuous circle might be established in the village.

On the other hand, the construction of water pipes, electric networks and telephone lines present less mandatory attributes. Although the participation in the building project is voluntary, only the contributors can use the water

or electricity. In a small production group, it is hard to become a free-rider who cannot be caught. Therefore, the participation rate was high. The group has successfully raised 3,200 Euro to build a water pipe linked to the rivers. The average annual per-capita income was 403 Euro in the region. The villagers could normally afford the investment, since it was only about 8 Euro corresponding to 2 % of their annual income. Without reasonable arguments, it is difficult for villagers to refuse to contribute to common interests in the group. Group heads will not allow any challenge to their authority. Other villagers will not give up their interest, either. Social pressure and neighbour monitoring are strong, and facilitate related performance. The relative good infrastructure in Manggang shows the success of collective action. Such experience in turn strengthens the leadership and governance of the leader.

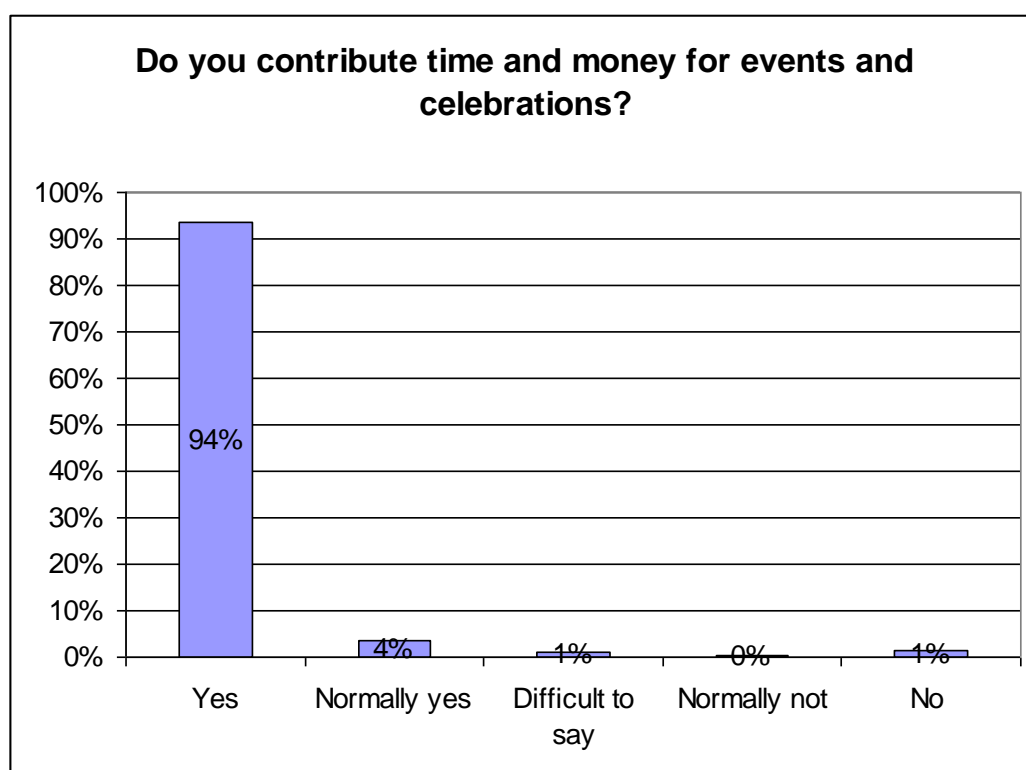
7.3.2 Festival help

There are many festivals throughout the year. Besides the Chinese Luna New Year, weddings and funerals are the most important events in the village. Weddings ceremony usually last two or three days. The host family invites the best cooks to prepare and serve the food. Other group members come to help out when they are available. At the end of ceremony the host family compensate them with little gifts like towels and candies. Invitations to wedding ceremony are made and distributed in the production group. But there is no invitation for funerals. Most group members normally come to the funeral ceremony and pay condolences to the deceased's family by giving a bag of rice or cash equivalent to approximately 6% of their monthly income (about 3 Euro) after they learn about the news. The condolences do not cost much, but are a sign of respect and harmony in the neighbourhood. Therefore, only the opponents do not participate. It is a result of the antagonistic relationship with the host family, which is harmful for collective action and related benefits. The intensive interaction in a small community can sometimes cause conflicts and oppositional emotion. Although most villagers expressed their wish for harmony, they realized it is difficult to be achieved. Differences in opinion are acceptable and do not develop to drastic struggles. Quarrels and fights sometimes happen, especially when farmers are drunk. However, there are no religion- or ethnic-group-based conflicts (FCCD PROJECT REPORT 2006: 91). With the coordination and negotiation of authority figures, cooperation can still be achieved for the common interests in the production group, which can be a constructive basis for Fairtrade farmers' cooperatives.

A funeral service usually takes three days including lunches and dinners. The money spent on traditional customs and socializing is considered a regular expense in the family's budget. Most villagers want to contribute time and money to support the activities (Figure 46). It is a sign of solidarity. Farmers stay together to share the event costs for the benefit of the production group beyond immediate family or kin. Although the forms of contribution might be different, the intention is clearly indicated, and reflects the charity and loyalty toward most members within the production group. At the same time, the support is a natural reaction of group members and is good for everyone in the group. In the interviews, they expressed their opinion regarding maintaining the tradition within the production group.

Another ceremony takes place when a house is built. The houses in the village are normally built of bricks and wood. Without modern construction equipment like cranes to lift the main beams, this is difficult and requires a lot of labourers. The host family will ask for help from their friends and neighbours. The owner of the newly constructed house compensates the people who help by offering free lunch and dinner but does not actually pay them. Everyone is happy to help. Helpers have satisfaction in the well-being of the others, while the construction process is a good communication opportunity for all participators. They also know their beneficial activities will be reciprocated, even without explicit agreements. They believe that others will act in a friendly and reliable way in the future.

Figure 46: Festival help survey in 2009



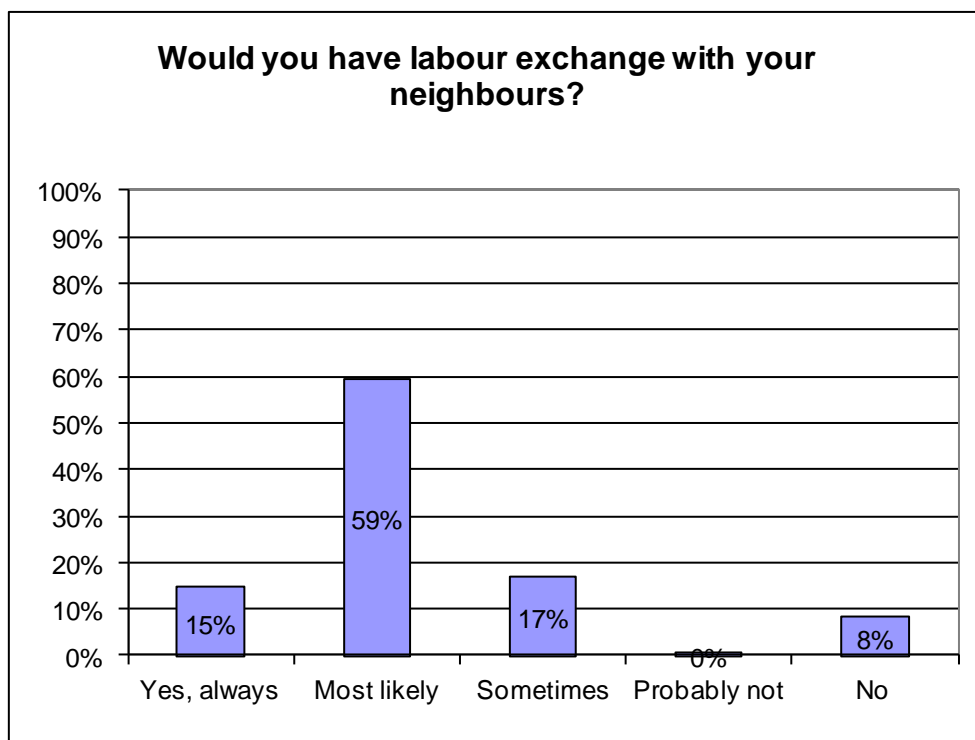
Source: Author (2009)

7.3.3 Collective action pattern

Labour exchange among villagers has been a common practice for many years. Facing the limitation in natural resources and productivity, the villagers have to form tight relationships to solve the shortage issue. Reciprocity, morality and good relationships with neighbours are the foundation of labour exchange. Although labour exchange is free of charge, it requires a lot of organisation and cooperation. The villager who receives the help has to return the favour later. The important consideration is about the direction of development. Nowadays, cooperation is the dominant choice (Figure 47). The sum of answers on labour exchange with neighbours “Yes, always” and “Most likely” is 74%, since the middle-aged and older people consider labour exchange ideal. They are in charge of their families and lead their relatives. For them, helping each other is not just a financial issue to save money but also a way to connect people and bring the community together. However, this idea is not popular among the younger generation, who would prefer to hire migrant farmers to compensate the labour shortage. The share of “No” is 8%, while “Sometimes” is 17%. They think that everyone is busy and has their own things to run. It is a waste of time and energy to organize labour exchange,

especially when they have the ability to pay for the work. The relationship between employer and employee is simple and clear. The function of legal institutions is recognized, although most contracts are unofficial and oral. Such institutional arrangements can possibly replace labour exchange, a performance based on personal relationships, when the new young generation grows up and gradually obtains control and power over the family. It implicates that an appropriate introduction of a contract system might reduce possible disputes and enhance farmers' performance from a long-term perspective, while the exchange activity can be encouraged to further benefit cooperation in the group.

Figure 47: Labour exchange survey in 2009



Source: Author (2009)

In the survey, a hypothesis is submitted to villagers. They have to choose one of the two options:

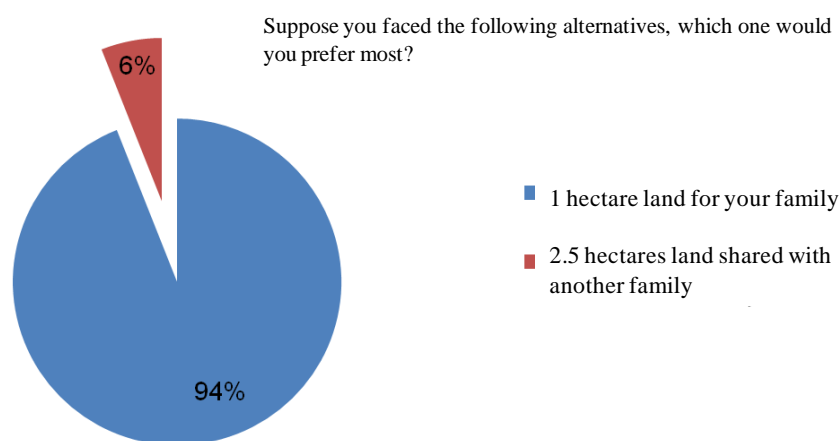
- 1 hectare land for the own family only
- 2.5 hectares land shared with another family

Most of them prefer to manage their land by themselves, although the plot of land in this case is clearly smaller than in the other option. The desire to have one's own land is very strong (Figure 48). During the group discussion and interviews, some villagers expressed their willingness to cooperate with other villagers, typified by Mr. ZHAO's statement: *The advantage of*

collective power is well known. However, our land ownership cannot be changed' (Interview 30). The head of Manggang production group and several group representatives agreed with this and explained further. They realized the weakness of individuals and wanted to establish collective power to protect their interests in the market. However, they were afraid their title deeds for their land would be taken away in the name of collective cooperation.

In the discussions, the villagers' legal awareness is again shown. Although they do not realize that they only have the use rights, they clearly understand the importance of title deeds. They know their rights about land are based on law and related deeds. Therefore, legal institutional arrangements can probably become a local point of Fairtrade certification. Relevant institutional confidence can improve the acceptance level of the villagers and benefit the establishment of Fairtrade farmers' cooperatives.

Figure 48: Farm and Land options in 2009



Source: Author (2009)

Collective action can clearly reflect the performance mechanism and fundamental operational unit. Public service is a good example to describe this aspect. Although there is no official sanction method, members participate and contribute their time and money, since public service is based on the decision in the production group meeting and is signed by the family heads. The construction of road and water pipe proves that the internal forces in the group are strong enough to regulate farmers although there is no official contract.

Besides some traditional collective activities in the production group, such as wedding and funeral ceremonies, farmers' cooperation is popular in

Manggang production groups. Labor exchange can demonstrate it well. Most villagers organize this not only from an economic perspective but also from an aspect of social communication (FEI, X. 2007). Intensive interactions among villagers create strong social pressure that facilitates collective action (XIONG, W. 2008). Middle-aged and old decision makers prefer collectivism and search for harmony and cooperation in the village. With high levels of respect and reputation, group leaders have the power to stabilise the governance system and promote collective action in the village. However, some young men do not want to foster relationships with other villagers. They prefer to openly express their own opinions and think about their individual interests. Individualism is gradually becoming popular in the young generation (HE 2009). This can probably present an evolutionary trend of local communities and needs to be considered in the organisational design of Fairtrade cooperatives. The efficiency and stability of Fairtrade certification can be affected. Furthermore, the linkages with outside can possibly introduce new elements into the production group and influence members' cooperation. In the next part, network is described to observe the external influence for local communities.

7.4 Network

Network is a major indicator for the structure of social capital and is based on a complex concept. If farmers have a relatively wide network through migration or interregional projects, they can gain extensive information, receive training and have numerous opportunities. Education, media and personal experience gradually change the way they think and their social perception. When they go back to the village, they can possibly spread new concepts, like individualism. Fresh ideas can have an influence on local culture and society. To evaluate the performance stability of local collective units, it is important to observe the movement of the population in the village. On the other hand, external authority and its intervention are necessary to achieve extensive cooperation and facilitate Fairtrade certification. The external authority needs to have connections with the local community and be capable of achieving the essential recognition. In the section, all local associations are investigated to assess the compatibility and potential for the required bridging connection.

7.4.1 Movement of population

In the entire administrative village, there are about 2200 villagers. Just 2% villagers move out of the village for work. A small number of them go to

colleges. They prefer to find a job in the cities after graduation. There are also a few migrant workers from outside. There is almost no land adjustment that is popular in coastal rural areas (HE 2008: 44). Few villagers want to transfer their land. The administrative village has also no ability to arrange land for immigrants. In the Dayutan natural village, there have been no migrants in the last five decades. In the Manggang natural village only a doctor has moved in and opened a small clinic for the local farmers. He rented a piece of land and has run his clinic for forty years. Leasing a piece of land is not just an agreement between tenant and landlord. The permit has to be approved by the administration at the level of the administrative village. After that the doctor had to supply the documents certified by a notary to prove his financial capability, and also an official contract signed by the landlord. The lengthy application process makes moving into the village difficult. The close and cohesive network of villagers presents certain exclusion phenomena.

However, the situation is different for seasonal migrant farmers from other regions. In the coffee harvest season, many migrant farmers from the other side of Nuijiang River join the labour force. This creates a local labour market making it easy for the villagers to hire extra help. Because the labour demand is seasonal and temporary, the migrant farmers simply live and eat with their employers' families. In such close daily contacts, they gradually recognize the economic advantages of coffee planting and the opportunities for learning the related agricultural practices. Later, they introduce coffee back in their home region. The rapid increase in coffee plantations in Nuijiang valley proves this learning process. The migration activities are usually caused by personal decisions and economic motivation (TREIBEL 2011: 39-45). Extended networks through population movement can probably help farmers transcend their local boundaries (WOOLCOCK and NARAYAN 2000: 7). However, migration at the local level does not extend the bridging network of farmers, but rather strengthens the bonding linkage with other farmers from poorer villages and promotes the development of nearby regions. If Fairtrade certification can be successfully achieved in Manggang, the pilot effect can possibly influence other regions. On the other hand, large scale migration might weaken the cohesion and mutual support in the production group (HE, X. 2009: 13). It could probably threaten the local governance system, although current social pressure and concern seems to be strong enough to stabilise a possible Fairtrade cooperative. A successful pilot project is necessary to encourage people and create a virtuous circle for Fairtrade certification.

7.4.2 Different local organisations

Villagers need an organisation with bridging characteristics for the necessary external intervention to participate in the Fairtrade certification market, while the organisation has to be capable of obtaining the villagers' recognition and confidence. There are two general contrasting possibilities. The first is an original organisation with external linkages, and the other is an external institute with local connections. To identify a suitable one, all local organisations are studied from the perspective of structure, continuity, function and modification possibility.

GaoLiGongshan Farmers' Biodiversity Conservation Association

– Structure of the organisation

When it was established in 1996, 50 members voluntarily participated. By 1999 the association entered its golden age with over 200 people on the member list. Most of them were honorary members from other provinces. Through development projects, they knew the organisation and wanted to support local conservation activities. They did not always attend relevant events. When they visited the village, they paid a fee as honorary members. In addition, 78 farmers freely joined it from the administrative village. As part of the project contribution, the conservation association was supported to raise the self-management capacity of the local farmers (PROJECT EVALUATION REPORT 2004: 239). The project committee organised the events for the association. There are eight members in the committee (PROJECT EVALUATION REPORT 2004: 221). The chief leader was the village head, while the vice leader came from the natural park management bureau. A man from the local forestry station was in charge of the technique guidance. The other members consisted of two production group leaders and three villagers' representatives. The committee worked as a coordinator and operator. Each member had his network and relevant resources. While the village head, group leaders and representatives had local social relations and governance power, two officers provided technical support and relevant governmental connections. For related funding, they had to discuss conservation activities and concrete details with project managers. According to the purposes and disciplines of the project, managers evaluated the activities and made the final decision. The committee was responsible for the performance based on the local organisational mechanism. Finally, the operation was evaluated and described in project reports.

As a project by-product, GaoLiGongshan Farmers' Biodiversity Conservation Association was supported in subsequent development and environmental protection programs (table 20). It was established with the aid and guidance from the project of the U.S. MacArthur Foundation on 8 December 1995¹⁹. Yunnan Provincial Science & Technology Commission was the project local partner, while Kunming Institute of Botany was responsible for the coordination among different stakeholders. It is the first farmers' association for biodiversity conservation in China. Although the project was closed in 1997, another project, namely the forest resource management and biodiversity conservation in GaoLiGong Mountain, was started in the same year. It was managed by the China Exploration & Research Society in HongKong. The project supported management efficiency in forest resources and institutional innovation at the community level. The civil and environment-friendly characteristics of the association were suitable for this purpose, and the Kunming Institute of Botany continued to be involved. The farmers' association received development funding and assistance services. The project was a one-year short-term program. At the beginning of 1998, activities were gradually stopped. However, almost at the same time, an international project organisation was looking for suitable research areas for the project Forest, Conservation and Community Development Project. It was a large program organised by Wageningen University in the Netherlands, the Dutch Government and the China Forestry Administration and Forestry Department of Yunnan Province. Due to the farmers' association, Manggang natural village was chosen and became a major research area.

Despite the diverse members in the committee, it remained stable in the context of social identity. Its chairman and members changed regularly according to the results of the leader election in Baihualing administrative village. The village head always took over the leadership of the association, while the loser in the production group election had to give up his seat in the committee. This was confirmed by Mr. Li who was the first formal chairman, main organizer of the association, and head of administrative village. Later, he lost in the village election and was replaced by the new village leader. This system has its advantages and is accepted by most members. In the interview with Mr. Li, two main reasons were mentioned. The first one is about the ability and authority. For instance, the head of the administrative village can usually fulfil the requirements. He can efficiently

¹⁹ Data are from the interview with Mr. Li, JiaHu who is the first formal chairman of GaoLiGongshan farmers' biodiversity conservation association.

manage the association. Because of his double roles, he has strong influence. Another reason is representativeness. Although many members are honorary, the actual actors are local farmers from the administrative village. The association had several agreements with various institutions or governmental departments during the Dutch international project. The village head, group leader and villagers' representatives can better represent them and handle issues with outside bodies. The whole collective decision-making process was regulated in the starting phase of the association. Due to the wide geographical distribution, farmer members are divided into two groups based on the location of their natural villages. In the end of the year, member conferences were organised for the decision making about the plan for the following year, while the proposals and related details were usually provided by the committee. The main purpose of the association was to improve the awareness of environmental protection and relevant capacities. Every year, there were three or four times more educational trips in the village. Financial issues and training materials were provided by project funding. The village head, group leader and villagers' representative were responsible for the organisation of training activities. Members attended and other villagers were also encouraged to participate.

During the projects, the available resources were sufficient for the association, such as financial funding and assistance services from projects, and also membership fees and institutional support of the governmental department. Because of the different financial situation of the members, the membership fees are different between farmers and honorary members. For each farmer, 0.2 Euro per year was the standard fee, while his daily income was 1.1 Euro. Honorary members can pay as much as they want. Normally it is much more than what the farmers pay. Twice a year, the staff from the Forest Management Station comes to the village to teach the villagers about the forest and wildlife protection laws. Up to 1999, it held a dozen of conferences or seminars addressing the improvement in farmers' biodiversity protection awareness and planting technology.

– Continuity and function of the organisation

The association has a strong dependent characteristic as mentioned in the final report of the Netherland FCCD project (XIONG, Q. and ZHU, M. 2006: 293). Since the aim of project was to build up local agricultural finances to reduce the pressure on the forest conservation, not only the members but all farmers in the village obtained development funding and materials from the project. The benefit of farmers' association was well recognized by them. Since 2007, the development project has not been operated in the

administrative village. The relevant activities have been significantly reduced. Nobody pays the membership fee any more. The committee has also been dissolved. The chairman alone cannot organize the meeting due to the shortage of funding and network. The members are widely distributed in the whole administrative village. There is less daily contact among members. Without financial compensation, farmers also do not want to waste their time walking a long way for a meeting. Therefore there has been no member conference in the last three years. Only the training trips, organised by the forest management bureau, can be continued, since they belong to the routine work of the bureau. Related personal costs are included in the annual budget of the bureau, but participation rate is not high. Members are looking forward to another project to solve the funding problem. In the group discussions, members asked research co-workers about the possibility of a new project. Later in the interview, the former chairman Mr. LI emphasized the importance of economic development for environmental protection. For some villagers, the value of the association is based on the attraction of external support. On the other hand, the effect of projects cannot be ignored from the perspective of environmental protection. Relevant training has a certain effect. The meaning of forest protection was recognized by local farmers after several projects, while the importance of environmental conservation was strengthened in a series of related events. There are no more hunters in the village. The forest is also better protected than before. As a contribution of the forestry project, environmental awareness is improved to some extent. Farmers focus on coffee plantation, instead of lumbering wood (PROJECT EVALUATION REPORT 2004: 121). However, the dependency on management cannot be ignored. The association could not continue to operate and provide the related capacity, especially when the external support was stopped. The reasons behind this can possibly have helpful implications for the modification or establishment of local Fairtrade cooperatives. While the capacity building in the association is important for its development in a sustainable way, external intervention is necessary for a new grassroots association to contribute to bridging network and assistance. The certification process and the international background of the Fairtrade initiative can probably help farmers to cross their local boundaries, thereby progressively raising their competence and joining the global market.

– Possibility of modification for Fairtrade cooperative

Although the Fairtrade cooperative and biodiversity conservation associations have various purpose and intention, they can be compared from the perspective of organisational structure and formation manner. Like

Fairtrade cooperatives in other countries, the success of the local environmental protection association depended on the access to different resources. With the assistance of the project and its committee, the activities of the association could be smoothly performed. The committee worked well as a coordination platform for various capital and the management organ of the environmental protection association. The background and status of committee members ensured the resource flow for the association. Besides the financial capital that was provided by the project, members from the local forestry institutions created the bridging linkage and other human resources that were needed for the training courses. The bonding capital in the association was not very strong, since the 78 members were distributed in over 2300 farmers in the administrative village. The wide geographic allocation limited the potential for intensive interaction and effective cohesion among members. However, the project committee could partially compensate the deficiencies due to the integration with the local governance system and related intutional resources. Farmers were mobilized to some extent, but had to participate in relevant educational activities. The remarkable influence of the project and its committee determined resource access for the association and enhanced the dependence of association members. The end of the project committee was one of the major reasons for the poor functioning of the association.

Fairtrade certification clearly puts higher demand on the association and its structure. Before the association, members received support and joined in special programs. Now they have to actively apply for the certificate, manage the certification process, and produce coffee according to Fairtrade standards if they want to establish a Fairtrade farmers' cooperative. It is a great challenge for them and their management system. The requirements for resource access are higher. Relevant improvements are important for external support to have any effect in the Fairtrade association. While the integration with institutional resources, such as laws, policies, rules and local governance system, needs to be strengthened, the requirements for human resources are extended from environmental education to management, coordination and technique guidance. For optimization of the access to different capital, social capital needs to be comprehensively used for the Fairtrade cooperative to build closer bonding and bridging relationship with various actors to enhance cooperation and to consolidate the organisational mechanisms to increase performance effectiveness and efficiency. Thus, modification needs to considerably change formation manner and members' attitudes. The local history and customs might make modification difficulty. It is doubtful whether the biodiversity conservation

association is a suitable alternative for Fairtrade certification, when the establishment of a Fairtrade cooperative is possibly easier than a modification.

Table 20: Development projects in the village

Time	1994-1997	1997	1998-2004	2004-2007
Name	Forest resource management and biodiversity conservation in GaoLiGong Mountain	Research on interrelationships between local community livelihood and biodiversity conservation in GaoLiGong Mountain	Forest Conservation and Community Development Project	Consolidation period of Forest Conservation and Community Development Project
External Connector	Kumming Institute of Botany	Kunming Institute of Botany	Yunnan University of Nationalities	Yunnan University of Nationalities
Organizer	U.S. MacArthur Foundation and Yunnan Provincial Science & Technology Commission	China Exploration & Research Society (HongKong)	Wageningen University NL, Dutch Government, China Forestry Administration and Forestry Department of Yunnan Province	Wageningen University NL, Dutch Government, China Forestry Administration and Forestry Department of Yunnan Province

Source: Author (2012)

Christian church

– Structure of the organisation

Baihualin administrative village is ethnically mixed with a population of Han, Lisu, Yi and Bai Chinese. Most of the Lisu Chinese are Christian. The Christian religion has blended into Lisu's culture and traditions (ZHANG, Y. and LIU, X. 2007: 20). In 1921 the first missionary from America brought the Christian religion to the Baoshan region (LU, J. 2007: 204-205; HE, M. and ZHONG, L. 2007: 107-112). In 1925, the written Lisu language was created by a British pastor based on Latin letters. Five years later, the Lisu Bible and gospel songs were printed with the help of the Christian group China Inland Mission. In 1949 over ten thousand Lisu people believed in God. Since 1958, different political movements have been organised by the Communist government. The Christian religion was considered as an invasion of Western imperialism to the minds of the people. All religion activities were forbidden. After the Cultural Revolution, the religious ban was gradually lifted. The member of Lisu Christians increased again. In

1990 there were about ninety thousand. The development of Christianity has overcome the limitation of ethnical groups. Not only Lisu Chinese, but also some of the Han Chinese have become Christians in the administrative village, which does not have a Christian tradition. There is a Lisu pastor in the church (Figure 49). Because of limited donations, the pastor is not full time and has to also work as a farmer. In addition to the pastor, there is a church council to manage the regular activities, while the members are also local farmers.

– Function and continuity of the organisation

The cohesion among Christians is high. They help each other and follow the rules of the church. On Sunday mornings, Christians get together in the church for worship. In order to host more people in the church service on Sunday, the old primary school was bought by the local church. They eat meat on Sunday, but not on Friday. Furthermore, the Christians avoid all work activities. Because of this, they are considered lazy farmers by some villagers. Despite not everyone being capable of understanding them, the Christian belief impresses other villagers. The number of Christians is growing in the Manggang production group. However, the religious situation is very different in the production groups. This is reflected in the interviews with the heads of various production groups and the survey typified by the statement of the village head: *'Although the influence of the church is generally strong, the specific situation in each production group is different'* (Interview 1). While the effect of the church in Manggang village is growing, most farmers do not believe in God in Dajutan village. In the interview, the leader of Dajutan production group mentioned that *'The Christians here do not go to church any more due to our influence'* (Interview 1). In contrast, the Christians are active in Manggang village as stated by the group leader: *'Many young people believe in God, especial the women (Interview 22 and 21)'*. 36% of the villagers take part in church activities, while the pastor lives in the natural village.

The influence of the church was also taken into consideration in former projects. However, its contribution to economic development and education is not significant as documented in the final report of the FCCD project (XIONG, Q. and ZHU, M. 2006: 336). The aims of the projects were usually focused on environmental protection, livelihood improvement and related social issues. The pastor expressed his conservative opinion about church and economics in the interview. He prefers religion and daily life to be separated. The involvement of economic factors can only lead to unexpected problems or disputes with respect to belief and church. He

stated: *'The church can only be based on God: The spiritual relationship has to be pure'* (Interview 14). He is opposed to all kinds of business models in the church and among believers. Fairtrade certification would be directly influenced if it were to operate in the framework of the church.

The development of the church is generally healthy. The network is social. Although cohesion is strong among the members, there is no sectarianism or ethnocentrism in the church. Not the organisational power but the belief itself is important. Based on this, the number Christians is gradually increasing. Relevant management costs are also low, as most work is voluntary and free of charge. Even the pastor has no official salary. The platform of the natural village provides stability and simplifies the member structure, which can independently grow without external assistance.

– Possibility of modification

The Christian church has a strong influence on its members with a high level of bonding capital. The organisational mode is cohesive and powerful, based on the production group. The Christian belief is attracting more and more people and is increasing trust among its members. From the perspective of promotion, its potential is high. It can motivate certain people to be cooperative in a short time. However, its closure feature cannot facilitate the access to other recourses and satisfy the requirements of a bridging network for a Fairtrade cooperative. The participation of the church can lead to external troubles, since its religious and political factors are not favored in China. It has barriers in terms of access to institutional resources and local governance system. Furthermore, the Fairtrade cooperative is a kind of economic organisation. External aid and relevant influences can possibly lead to conflicts with its traditional financial management. The local pastor does not support relevant activities because of his theological opinions. People in church should focus on God. Based on the God's love and words, there is a harmonious relation among the believers. There is a remarkable difference from the perspective of functional manner in the organisational development process. It is not about the specific standards and concept of Fairtrade, but a distance between trade and belief. The pastor is an opponent of all business models in the church of God, including Fairtrade. Therefore, the church and its network can probably not contribute a lot to Fairtrade certification, unless the pastor has a new perception about Fairtrade and changes his mind.

Figure 49: *Pastor in worship; Part of the church in the village*



Source: Author (2009)

Senior Association

– Structure of the organisation

The senior association was established in 2002 in each production group to represent the respect for the elders. The decision was made by the regional government and transmitted as an administrative order. Each group has to establish a senior association to provide a platform for the older generation. Thus, the leader of the production group is also the chairman of the senior association. He is responsible for the set up of the council and the organisation of the annual meeting. Several elders with good reputations are council members. All old people in each natural village have the right to participate in the events. The regional government has provided some establishment funding. In the early period, visits to nearby cities were organised for the elderly. Later, the association constantly reduced its scale and number of activities due to the tight budget. The membership fee is the only income for the association. Now only the annual meeting can be held at the level of the natural village (Figure 50). In few natural villages, there is even no dinner party after the meeting. To save money, just tea and candy are offered in the meeting. All expenses and income are recorded and announced in annual meeting. The elders discuss things of interest and exchange information about their families and villages most of the time. It is a relaxed atmosphere. The elders like to chat with their old neighbours from the village. Therefore, the attendance rate is always high. In the end of the meeting, the membership fee is collected. Since some seniors have a difficult financial situation, the collected amount is low in few villages.

The senior association in Manggang natural village is relatively well organised. Membership fees can be collected on time, although there is always a deficit so the chairman has to balance it with his own money.

Many seniors do not have the financial power and independence, since they have no income from taking care of their grandchildren and doing the housework. Only a few members can pay the full association fee. There are four elders in the council including the chairman himself (Figure 51). One of the members is responsible for finance management and annual financial report presented in the meeting, while another person is in charge of the dinners held after the meeting. The dinners have been prepared in his house during the last four years. He also asks his young family members to help.

– Continuity and function of the organisation

Most members are willing to participate in the activities. It is a good chance to communicate with neighbours. Some elders may share their personal problems with others. Although solutions cannot always be found, talking itself is good for the involved persons and relieves their stress. Besides information and opinion exchange, all organisational arrangements are announced and discussed in the meeting. Relevant persons make a speech to present their ideas. There is no voting for the final decisions. But these are made after extensive negotiations. In the meeting in 2009, an old man in the council wanted to resign from his job, since he had to take care of his grandson. His work in the association would take too much time. His son and wife continually complained. However, there was no other suitable candidate in the association. Most members knew his situation well, and suggested him to serve at least one more year. Finally, he was convinced and appreciated the trust and respect of the others. The other three elders in the council also have to continue their work, as stated by the head of Manggang village '*A man cannot take the job without a certain economic capacity and authority in the family.(Interview 42)*' Due to their age, the elders will gradually reduce or lose their control of the family. The situation in the senior association is getting worse. Its development potential is limited according to its characteristics.

– Possibility of modification

The senior association has advantages in the organisational structure. It can be found in each natural village in GaoLiGong Mountain area and is a consequence of the relevant policy. It is integrated with the local governance system, while the chairman is always the group head in each village who has certain abilities and reputation. Based on the operational platform of the production group, the cohesion is strong among members with intensive interaction. The levels of participation and transparency are high. However, it cannot effectively mobilize all families in the production group, since only a few members can still make a decision in their families.

Most of them do not go to meetings of the production group and administrative village. Although they do not care about the technical details or make relevant decisions, they can use their bonding network to facilitate the publicity of Fairtrade certification. To enhance the operational capacity of the association, it is necessary to enlarge the size and attract more famers of different ages. The organisational structure and management also have to be largely modified in the development progress. In the meanwhile, it has no external contacts and related competence to solve the difficulties in the field of certification application and maintenance. Due to its specific member structure and related organisational function, it has less potential to facilitate the input of different resources. It does not seem to be a suitable institute for the external support to perform Fairtrade certification.

Figure 50: Annual meeting of senior association in 2009



Source: Author (2009)

Figure 51: Membership fee collection and dinner



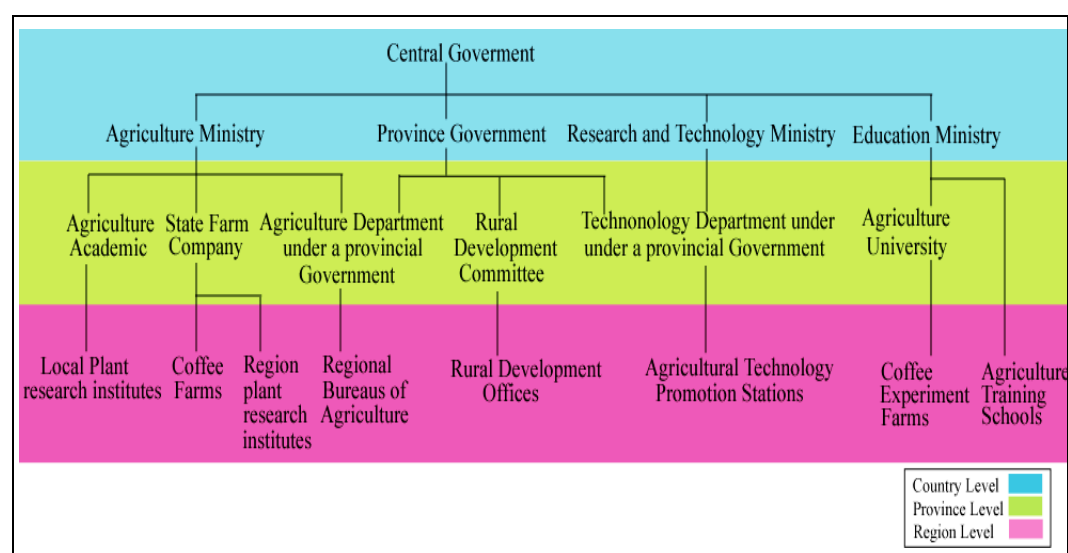
Source: Author (2009)

Local Coffee Institute

– Structure of the organisation

The local coffee institute has about fifty years old. As a plant research institute, it officially belongs to Yunnan Agriculture Academic, which is a sub-body of the Agriculture Ministry and responsible for relevant agricultural studies (Figure 52). The main purpose of the institute is the dissemination of related agricultural techniques based on the specific local farming situation. Since the Baoshan region is a traditional coffee planting area, the institute focuses on the technical support of coffee farming. It has a coffee germplasm with over three hundred different coffee varieties. Besides the coffee department, there are some small research departments for other cash crops, such as longan and banana. There are almost forty researchers in the institute. All of them have at least a bachelor title and have graduated from various agricultural research institutes or universities. The salaries and management expenses are financed by Yunnan Agriculture Academic and there is also a fixed annual household budget. To have greater financial resources, a commercial enterprise was established several years ago. It engages in the processing and sale of roasted coffee and instant coffee. The corporate representative is the director of the research institute. Some researchers are transferred to the company. In addition, there are some contract workers who are in charge of the work in the production line. The company is financially dependent; its researchers are supported by the institute. All workers are paid by the company and have labour contracts.

Figure 52: The tree root of administration departments



Source: Author (2012)

– Continuity and function of the organisation

The coffee institute is an official research organisation and sustainably financed by the institutional system. Like other local research institutes, a company was established to increase income, which is a common and legal practice. While the institute focuses on relevant research and dissemination of agricultural techniques, the company is involved in roasting coffee, instant coffee production and sales.

Although the institute is responsible for the whole region, including Baihualing administrative village, there had been no direct contact with the villagers before. A few years ago, two young coffee farmers came to the institute and asked for technical support. Local researchers provided handbooks and guidelines about coffee growing published by the research institute. Due to our project and related field work, local researchers visited the village. The two coffee farmers came to help and became project assistants. They introduced us to the heads in the village. Although the leaders did not know the researchers, they respected the coffee institute and facilitated the field work.

– Possibility of modification

As a research institute, the structure and member composition are fixed, while its official institutional background increases the credibility for the Fairtrade project. The administrative village in Baihualing believed in the coffee institute, since it is a part of the administration system. *'It is always good to cooperate with governmental department'* said a villager (Interview 35 and 36). In contrast, some farmers hesitate and prefer to work with company, as they are afraid the financial capital of the coffee institute cannot support the whole project to the end. Although the opinions on this are different, its reputation, technical capacity and human resources are remarkable at the regional level and are well recognized by local farmers. If funding can be guaranteed, the institute can convince the local farmers. From the perspective of bridging network, it is competent as a promotion body. To achieve sustainable development, it is crucial for farmers to obtain the latest technology and have numerous contacts. However, the institute's superior position and ability can possibly enhance the risk of structure holes and information shortage. It is not an original organisation of the villages and has weak bonding linkages with local farmers. There are challenges regarding villagers' acceptance and system compatibility. It is necessary to considerate the operational mechanism of certification promotion and related institutional protection.

Table 21: Local organisations in 2013

Typology	Initiators	Participants	Operational Platform	Cohesion Level	Active Level	Finance Situation	Stability
Farmers' Biodiversity Conservation Association	International projects and farmers	Farmers and honorary members	Administrative village	Low	Low	Bad	Low
Senior Association	County government	Old farmers	Production group	Strong	Medium	Medium	Medium
Christian Church	Lisu and Han Chinese farmers	Christian farmers, especially young people	Production group	Strong	High	Good	High
Coffee research Institute	Local Agricultural Academic	Researchers and contract workers	Region	Medium	Medium	Good	High

Source: Author (2013)

Based on the platform of the production group, the senior association and church have a high cohesion level, high activity and appropriate stability. The production group offers a scenario for intensive interaction and face-to-face communication among members with an extensive information supply. Based on this, cooperation and related collective actions can be expected. However, both associations cannot be modified into a Fairtrade cooperative due to their component characteristic and organisational purpose. Elders in the senior association cannot usually make decisions about economic development, and can contribute little to the events about production and livelihood improvement, including Fairtrade certification. At the same time, the pastor is against all kind of business models and believes Christian have to focus on God and religious activities in church. Without his permission, fair trade cannot be operated in the Christian association.

Compared with the other organizations, the coffee institute and farmers' biodiversity conservation association have less bonding linkages with local farmers. The institute does not actively participate in the production activities and social events. Farmers do not know it well. Although the institute has governmental identity and technical competence, local farmers might not recognize and accept it. Similarly, the conservation association has no close relationship with the villagers. In over 2400 villagers, there were only 78 members. The large geographic area of the administrative village increases the difficulties in members' interaction and acquaintances. The cohesion and independency levels are low in the association. When the external support disappeared, it could not continually manage its activities. However, its committee and related features cannot be ignored. It has

proved its functional importance and has made remarkable contributions to the agro-forestry project. Its members have different social backgrounds. The village leader, production group heads and villagers representatives brought operational power from the local governance system, while the officers offered technique assistance and bridging linkage in the project. The combination of the different committee members effectively promotes project performance. In the project report, such integration mode was emphasized to mobilize various local resources and enhance operational efficiency (PROJECT EVALUATION REPORT 2004: 289-290). This can probably provide constructive implications for the establishment of a Fairtrade cooperative.

To successfully perform Fairtrade certification, the cooperative needs to considerate the local situation. The original organisational mechanism shows its advantages in the promotion of the development plan announced in the scope of the administrative village. While the operational platform is the production group, the final decisions are made in each family and valid with the signature of the family head. Based on traditional customs and value systems, the organisational mechanism can generate powerful social pressure to guide villagers' activities and maintain their obedience. Concrete performance is promoted, assessed and inspected by esteemed persons who are chosen in the elections and reflect local power allocation. They are boundary spanners of their own groups and specific operators. This individualism might reduce the efficiency and effectiveness of the Fairtrade promotion process, which is favored by the young generation and strengthened by population movement. However, social pressure, originating from the current governance system, is stable and powerful. With the support of the local organisational mechanism and external authority, a Fairtrade cooperative can possibly be established with sufficient participators.

8. Summary and recommendations

The definition of coffee quality is extended from physical and cupping considerations to the moral value and environmental concerns. The success of the Fairtrade market seems to show the change in consumers' preferences. Fairtrade is a specific business model with equality and mutual benefit principles. Relevant ethical values and environmental promises are realised with minimum price, premium and farming requirements. These tend to benefit farmers and their communities by enlarging their bridging network and dissolving the barriers of inter-regional market access. If farmers can enter a Fairtrade farmers' cooperative, they can profit through a shortened value chain and stable sale price. This concept, therefore, is growing in popularity worldwide, especially in the field of coffee. The establishment of a farmers' cooperative is the precondition to access Fairtrade certification, while efficient management in the cooperative is determinant for the sustainable development of Fairtrade certification. The vitality of a cooperative can largely depend on sufficient access to the local social network and related resources, which are important for the establishment and development of a farmers' cooperative. To solve the dilemmas and facilitate the coffee farmers' participation in Fairtrade certification, this research aimed to classify local levels, identify the group units and utilize its original resources and regulations to provide constructive implications for the establishment of a Fairtrade farmers' cooperative according to the local socio-economic situation and relevant Fairtrade standards. From institutional and organisational perspectives, the local community and relevant farmers' associations were studied to investigate the organisational structure for a Fairtrade coffee cooperative in a rural area such as Yunnan, China.

Fairtrade standards are formulated from economic, environmental and social perspectives. The comprehensive standards require certain high management and technical capacities of the farmers' cooperative for environmentally friendly agricultural practices and the implementation of social welfare projects. The access to certification is strongly dependent on the resource support available to farmers, while external assistance is important to facilitate the access to different livelihood resources and to promote Fairtrade certification, especially in the beginning stage. With the help of external institutions, the internal organisational mechanism can better face the challenges in the Fairtrade certification process. The external institutions can provide financial support, human resources or institutional

credibility to reduce members' anxiety and hesitation about the economic risks in the transition phase.

With the consideration of possible challenges and the local situation, social capital was studied to provide constructive implications for the operational mechanism of a Fairtrade farmers' association in Yunnan, China. The concepts of 'homogenous group', 'federation platform', 'representative' and 'external authority' were emphasised with regard to trust, norms, network and collective action, the main factors of social capital. Manggang village was chosen as the research field, due to its typicality in terms of population size, natural conditions and coffee plantations. Various research approaches were applied. Based on a comprehensive literature review, a survey was designed to assess the trust, reciprocity, social concern, honesty and reliability levels in different collective units. The household survey was performed in three production groups for about 250 farmers. To determine the power allocation in the village and the operational mechanism in local NGOs, group discussions were conducted with relevant members and villagers. Based on the results of the discussions, some important informants, i.e., the head of the administrative village, leaders of the production group and chairmen of different NGOs, were selected and focused on in the semi-structured interviews. Furthermore, interviews were conducted with key persons at the provincial level, such as officers from the provincial Agricultural Ministry, the General Secretary of the Yunnan Coffee Association and researchers from the local Coffee Institute for more macro information about the agricultural policies and coffee industry.

The field work focused on different collective units at the local level, namely family, production group and administrative village. In the statistical analysis, the level of trust, reciprocity and social concern in the family was significantly higher than in the other two units. The rich social capital in the family can effectively mobilise its members and support related collective action. In the survey, almost all villagers tended to cooperate foremost with their family members in different activities, such as money loans, baby care and labor exchange. The small group size facilitates the density of members' linkage, while the kinship contributes the strong cohesion in the family. Furthermore, the strict family norms emphasise the leading role of the head and the obedience level of members that improve the performance efficiency of the group. Male dominance is evident in the power allocation. In 76% of the investigated families, middle-aged men are in charge of daily management. In the production group meeting, all decisions about the family have to be signed by the male family head to confirm their validity. The most important productive asset, land-

use rights, is also controlled by the family heads, which strengthens the consistency of family members' actions and the dominant power of the leaders. Although the family head makes the final decision, other members can participate and contribute to the discussion. Intensive face-to-face communication facilitates the low cost for achieving agreement. At the local level, family is considered to be the basic unit in collective actions and exemplifies the features of a homogenous group. In public service and festival help, the labour and financial input is not allocated to individuals but to families. In the research village, a relatively closed and traditional society, there is no other type of organisation that can replace the operational function and effect of the family. It could, therefore, be used as a fundamental element for a Fairtrade farmers' cooperative.

The production group (natural village) has the second highest score in the items of trust, social concern and reciprocity in the statistical analysis. In the survey, the positive answers reached about 90% for the neighbour relationship and the general impression in the production group even though its performance effect and cohesion is weaker than the family's. It presents an optimal negotiation stage for collective action at the local level. The high residential density in the group facilitates interpersonal action and mutual support. The limited number of group members (about 200 persons) can supply adequate information and increase related acquaintance. Active house visits of members facilitate the face-to-face communication about the events in the village, while harmonic neighbourhood relationships provide a stable foundation for effective cooperation among members. Almost 74% of the labour exchange took place at the level of the production group, while only 8% of the interviewees rejected cooperation with the other group members. In the production group, the shared norms and relevant organisational process are developed. To perform the specific order or proposal, a group meeting can be held to achieve collective agreement with beneficial cost. Whereas the final decision has to be confirmed by the approval of family heads in order to manifest the respect for family authority, a strong social pressure, generated in the local institutional mechanism, obviously exists to balance the farmers' interests and facilitate the achievement of agreement. Its effect is strengthened by the preparation before the meeting and the house visits after the meeting. Due to the close linkage and frequent interaction among members, the promotion pressure and monitoring power are sufficient to carry out the decision. Based on sufficient information within the group, violators can hardly find excuses to become free-riders. Facing the dominant social pressure in the whole production group, they have to accept the collective decision and work like

the others. It is not difficult to explain why the public goods provision is usually conducted and managed on the scale of the production group. The good common facilities also prove the role of the production group as a performance platform. In the survey, 98% of the interviewees wanted to contribute time and money to the events and celebrations in the production group. Only 1% was hesitant, while the other 1% refused to participate. On the other hand, a new social ideology change cannot be ignored in the promotion process of Fairtrade. In the group discussions, some young men preferred not to foster relationships with other villagers, but to have a contract connection with migrant workers. With less consideration for collective interests, they focus on their own benefit. This can be a threat for a Fairtrade cooperative and relevant cooperation in the long term, however there is no obvious danger at the moment because most of these men are too young to be the heads of their families and are not the authority figures in the production group. Social pressure in the family and group can help them accept collective decisions, until they recognize the benefits of Fairtrade certification and actively participate in the relevant cooperative. It is relatively clear that, as a performance platform, the production group can provide constructive support for the establishment of the Fairtrade farmers' cooperative.

Compared with the other two collective units, the level of trust, reciprocity and social concern in the administrative village is the lowest. Due to the large number of members (about 2100 persons) and spatial distance within the village, face-to-face communication is difficult to arrange. The loose linkage among villagers causes a lack of personal acquaintance and social concern, which has a negative influence on the trust among villagers. Collective action needs the support of an organisational mechanism and institutional system. Despite the lack of interaction among members, the leaders and representatives from production groups have to work with each other constantly. The village meeting and previous consultation provide the opportunities for their communication and relevant acquaintance. They often actively participate in different community-based NGOs and meet each other regularly. Public service, festival arrangement and conflict resolution also demand cooperation and coordination. The arrangement of delegacy, supported by the institutional system, shows its potential for an efficient connection with each production group, while the group members can be mobilised to some extent. Therefore, the top-down orders or development proposals are launched to the village heads and related committee, which will be transferred, discussed, performed and monitored by group leaders and representatives at the level of the production group.

The administrative village is the maximum-sized area influenced by local social capital. The integration of the local governance system and the institutional structure can benefit the fusion of exogenous and endogenous processes. An appropriate organisational integration with a local governance system can probably benefit Fairtrade certification and enhance its cooperative's performance and productivity levels, while the triennial institutional election can balance the power allocation and reflect the democratic principle of Fairtrade certification. Possibly, an institutional delegation system could be applied within Fairtrade farmers' cooperatives.

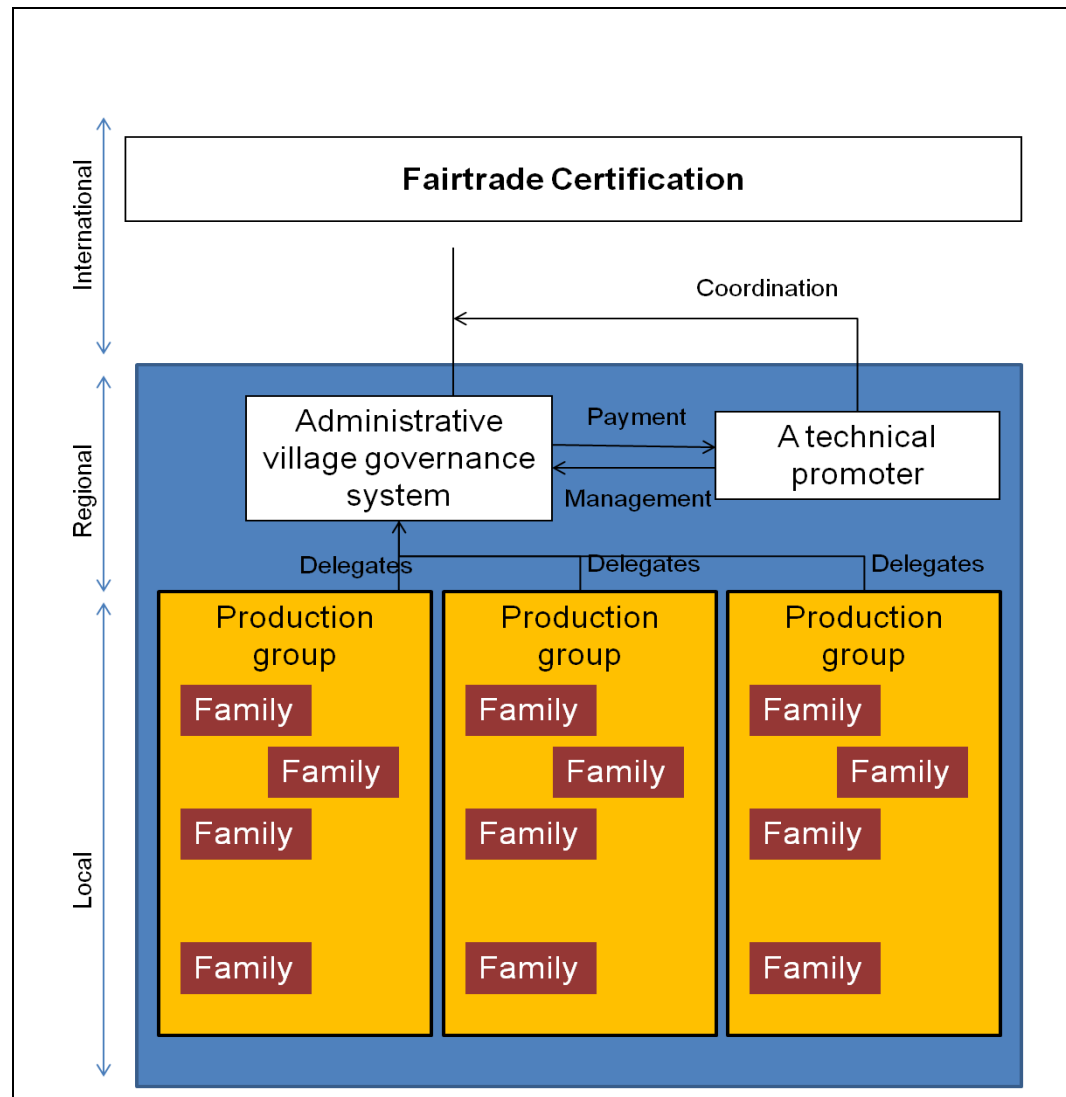
It is necessary to have connectors to link both types of factors for an efficient utilization of local social capital, while the delegation arrangement can be an effective pathway for the establishment of a Fairtrade cooperative. The delegates are specific messengers and operators in the local institutional system, who are village heads, group leaders and villager representatives. They work as 'boundary spanners' to link the government with villagers. The operational intentions from the upper layer are embodied by them, while the grassroots voice is reflected through them. Facing the stress of functional contradiction, they have to balance their identity with the help of daily practices. Their behavior is considered not only as individual conduct but also as representative action in an organisational context. The related cooperation is based on obvious organisational commitments. Due to the intensive interaction and relationship over a long period, the delegates are recognised and trusted by other villagers. With proper leadership competence, many of them are re-elected several times and have sufficient management experience. Based on their personal reputation and social influence, they maintain a cognitive harmonic environment in the village and have rich social capital that largely facilitates their routine work and relevant promotion activities. Based on the trust and recognition, the proposal/order promoted by the mechanism operators is trusted and accepted by villagers, even without relevant concrete experience and skills. An agreement can be achieved through the democratic process and confirmed by the signature of each family head. Based on a transparent and sufficient information supply, collective action can be realised with proper supervision. Finally, net profit which benefits the social capital controlled by the authority figures and related organisational mechanism in turn can be expected. It is a virtuous circle promoting community development, while individual interests are respected and manifested in terms of family. Due to traditional culture and the family land contract system, the family integrates its members' interests and plays the role of a basic economic unit. Its head has dominant influence and

representation for the family members. When there is a conflict between individual family interests and collective desires, the mechanism operators tend to persuade the family heads to smooth over the difference in opinion by strong social pressure.

Since Fairtrade certification is unknown to farmers, they can be hesitant to make such a determinant decision. The experiences and contributions from previous projects (agro-forest project) can be utilized, while a pilot project is necessary to demonstrate the benefit of Fairtrade certification and raise the attention of farmers, local technical institutions and governments. In the formal international agro-forestry project, community development programs and relevant subsidies are offered to facilitate the promotion in terms of financial assistance, technical competence and bridging network. A project committee was organised to assist and inspect relevant performance, while its contribution was proven in the project. Its members consisted of village heads, group leaders, villager representatives and clerks from regional technical institutes. It was a beneficial combination considering the local organisational mechanism and technical possibility. In the standards of Fairtrade, a similar concept is also presented, called '*Promoting Body*'. Cooperatives can have a kind of contracted partnership with a legal entity that works as a 'manager' and 'technician'. From the research, the local Coffee Institute showed its potential to become a possible candidate to benefit Fairtrade certification at the local level. The institute can contribute professional knowledge and human resources, while farmers have lands, labour, products and social capital. With starting funding, the integration between them can create a win-win situation. The institute's background has already gained particular recognition of village heads and some delegates. For most villagers, however, it is exterior and distant. The assimilation and repulsion of different heterogeneous elements can possibly increase the hesitation of villagers to participate and challenge the organisational pattern of a village-based cooperative. Due to the weak linkage with local people, the institute has less constraining force on them. It is possible that the villagers have too little confidence to work with the institute. The contract and agreement, broadly used in the village, seem to be possible solutions, since they can partially reduce the risks and increase transparency. Related legal obligations and rights are clearly documented, which can facilitate people's cooperation and promote collective action. An appropriate Fairtrade committee could be built up based on the service contract and the cooperation between the Coffee Institute and powerful delegates in the village. It could be a useful leadership arrangement to increase the farmers' confidence and the effectiveness of performance.

According to the research conclusions, an organisational template is designed and illustrated in the following diagram (Figure 53):

Figure 53: Fairtrade organisational template



Source: Author (2012)

The organisational model is applied in the scope of the administrative village and based on its governance system. Family is the basic operational entity, while a negotiation and promotion platform is in each production group. Like their institutional identities and routine work, group leaders and villagers' representatives are delegates at the local level, who work as connectors, promoters and inspectors for the realisation of Fairtrade certification. Village heads are responsible for the communication with the regional Coffee Institute and international Fairtrade initiative. To facilitate the coordination and management, the Coffee Institute is involved in the certification process and is regulated by a service contract. The cooperation between the Coffee Institute and the village committee tends to benefit the

capacity building of farmers, while Fairtrade certification can extend their networks that transcend the local community. Although the amount of Fairtrade certified coffee tends to be limited, the concept and intention can have certain eco-social influences in an oligopolic Chinese coffee market. During the Fairtrade certification process, the technical capacity and self-governance consciousness of farmers' cooperatives also can be increased to some extent. Besides the Fairtrade business, the farmers tend to have the suitable management capacity to offer quality coffee and obtain reasonable benefits in the mainstream market.

As demonstrated in the study, the meaning of Fairtrade is not just manifested in the business itself, but is embodied in the competence improvement and network extension for farmers and their associations. On the other hand, as a business model, the certification process needs to be arranged with the consideration of the whole value chain, especially the demand and marketing strategy of certified coffee. According to the customers' opinions and quality requirements, the emphasis of Fairtrade cooperative management should be located in the efficient coffee provision with a low agreement cost. Based on a local governance system, the village-based Fairtrade cooperative needs the support of social capital and external intervention to have an effect. Furthermore, a certificate is a product in the economic field of certification and accreditation. The official recognition in China would further influence the development tendency of Chinese Fairtrade products and related farmers' associations. Although the research was performed in a typical village in the mountainous Yunnan province, it seems to be suitable to other mountainous rural regions in China. To maintain the accuracy of application, it is necessary to conduct specific research about local socio-economic situations from the aspect of social capital to provide beneficial implications for Fairtrade certification in other areas.

References

- Adam, F. and Roncevic, B., 2003. Social Capital: Recent Debates and Research Trends. *Social Science Information* 42 (2), pp.155-183.
- Adamy, J., 2006. Starbucks Bets on China's New Social Mobility. *Pittsburgh Post Gazette* [online], 29 November. Available at <<http://www.post-gazette.com/stories/news/world/starbucks-bets-on-chinas-new-social-mobility-461341/>> [accessed on May, 9th 2012].
- Agricultural Bureau of Yunnan, China, 2008. The supply end of coffee raw material. [online], 09 July. Available at <<http://www.ynagri.gov.cn/news15/20080709/96309.shtml>> [accessed on May, 18th 2012].
- Agricultural Ministry and General Administration of Quality Supervision, 2002. *Pollution-Free Agricultural Product Management Rules*, Item 2. [online]. Available at <http://www.china.com.cn/policy/txt/2002-05/15/content_5145716.htm> [accessed on August, 3rd 2012].
- Agwanda, C., Lashermes, P., Trouslot, P., Combes M. and Charrier, A., 1997. Identification of RAPD markers for resistance to coffee berry disease, *Colletotrichum kahawae*, in Arabica coffee. *Euphytica* 97, pp. 241-248.
- Ai, F. and Pan, C., 1995. The editorial about industrialized agriculture. In: *People Daily Editorial*, ed. 1995. Beijing, China: People Daily Press.
- Anthony, F., Combes, M., Astorga, C., Bertrand, B., Graziosi, G., and Lashermes, P., 2002. The origin of cultivated *Coffea Arabica* L. varieties revealed by AFLP and SSR markers. *Theoretical and Applied Genetics* 104, pp. 894-900.
- Aranda J. and Morales C., 2002. *Poverty alleviation through participation in fair trade coffee: the case of CEPCO*. [pdf] Ford Foundation and Colorado State University. Available at <<http://welcome2.libarts.colostate.edu/centers/cfat/wp-content/uploads/2009/09/Case-Study-CEPCO-Oaxaca-Mexico.pdf>> [accessed on August, 23rd 2013].
- Aristoteles, 1980. *Rhetorik*. Translated by F.G. Sieveke. München, Germany: Fink.
- Baby Milk Action, 2010. *Why boycott Nestlé's Fairtrade KitKat?* [pdf] Cambridge, UK: Baby Milk Action. Available at <<http://www.babymilkaction.org/pdfs/Nestlefairtrade0210.pdf>> [accessed on July, 31st 2012].
- Bachmann, R. and Lane, C., 1997. *Vertrauen und Macht in zwischenbetrieblichen Kooperationen*. In: *Managementforschung* 7 (edited by G. Schreyögg/J. Sydow), 1997, pp. 79-110 [Reprint in: J. Sydow, ed. 2010: *Management von Netzwerkorganisationen. Beiträge aus der 'Managementforschung' (1st-5th editions)*. Wiesbaden: Gabler 2010. pp. 75-106].

- Bacon, C., 2005. Confronting the coffee crisis: Can Fair Trade, Organic and Speciality coffees reduce small-scale Farmer Vulnerability in Northern Nicaragua? *World Development*, 33 (3), pp. 497-511.
- Bai, G., 2003. The research about the interior law relationship of household. *Legal Forum* 5, pp. 49-52.
- Baier, A., 1986. Trust and Antitrust. *Ethics* 96 (2), pp. 231-260.
- Baoshan Daily, 2010. The development record of tobacco agriculture in Baoshan. [online] Available at <http://www.baoshandaily.com/html/2010-01-08/content_12629156553868.html> [accessed on June, 5th 2013].
- Baoshan Industry and Information Committee, 2011. The development situation of sugar industry in Baoshan. [online] Available at <<http://www.sugarinfo.net/front/infosend/colligate/topicsClickAction.do?topicsID=106305>> [accessed on June, 6th 2013].
- Baoshan News, 2009. The history of tobacco development. [online] Available at <http://www.baoshan.cn/1/2009/09/29/22@11197.htm>. [accessed on June, 5th 2013].
- Barber, B., 1983. *The logic and limits of trust*. New Brunswick, New Jersey, USA: Rutgers University Press.
- BBC, s.n. 2011. Starbucks drops its name and the word of coffee from logo. *BBC* [online] Available at <<http://www.bbc.co.uk/news/business-12125440>> [accessed on May, 12th 2012].
- Berthaud, J. and Charrier, A., 1988. *Genetic resources of Coffea*. In: R. J. Clarke and R. Macrae (eds.), *Coffee Agronomy*, pp. 1-41. Elsevier Applied Science, London, UK.
- Beugelsdijk, S., 2009. Bonding and Bridging social capital and economic growth. *Tilburg University* [online] Available at <<http://arno.uvt.nl/show.cgi?fid=94965>> [accessed on October, 23rd 2012], pp. 2-5.
- Bird, K. and Hughes D., 1997. Ethical consumerism: the case of 'Fairly-Traded' coffee. *Business Ethics: A European Review* 6 (3), pp. 159-167.
- Blackmore, E. and Keeley J., 2012. *Pro-poor certification*. The International Institute for Environment and Development, UK.
- Bonus, H., 1986. The cooperative association as a business enterprise: a study in the economics of transactions. *Journal of Institutional and Theoretical Economics* 142 (2), pp. 310-339.
- Bourdieu, P., 1986. The forms of capital. In J. G. Richardson, ed. 1986. *Handbook of Theory and Research for the Sociology of Education*. New York, USA: Greenwood Press, pp. 241-258.
- Bourdieu, P. and Wacquant, L., 1992. *An invitation to reflexive sociology*. Chicago, USA: University of Chicago Press.

- Bramall, C., 2004. Chinese land reform in long-run perspective and in the wider East Asian context. *Journal of Agrarian Change*, 4 (1), pp. 107-141.
- Brandt, L., Huang, J., Li, G. and Rozelle, S., 2002. Land rights in rural China: facts, fictions and issues. *The China Journal*, 47, pp. 67-97.
- Burt, R., 1992. *Structural holes: the social structure of competition*. Cambridge, USA: Harvard University Press.
- Burt, R., 1997. A note on social capital and network content. *Social Networks*, 19: pp. 355-373.
- Burt, R., Hogan R.M. and Michaud C., 2000. *The network structure of social capital*. [pdf] Chicago, USA: University of Chicago Booth School of Business. Available at <<http://faculty.chicagobooth.edu/ronald.burt/research/files/NSSC.pdf>> [accessed on January, 4th 2013]
- Business Monitor International, 2009. *China Food & Drink Report Q2 2009*. London, UK: BMI.
- Butler, J. 1991. Toward understanding and measuring conditions of trust: Evolution of a conditions of trust inventory. *Journal of Management* 17 (3), pp. 643-663.
- Certification and Accreditation Administration of China (CNCA), 2006. *GAP standard and certification*. [online] Beijing, China: CCNA. Available at <wms.mofcom.gov.cn/table/06120404.ppt> [accessed on October, 21st 2012].
- Certification and Accreditation Administration of (CNCA), 2010. *China certification and accreditation development strategy research*. Beijing, China: China Standardization Press.
- Chai, F., 2005. Why labour immigration does not reduce the income distance between urban and rural regions. *Theory Front Journal* 20, pp.18-21.
- Chai, F., Wang D., Du Y., Zhang, C. and Wan M., 2006. *Rural development and increase of farmers' income*. Beijing, China: China Labour and Social Security Press.
- Chang, B., 2010. Starbucks to grow in Yunnan. *China Daily*, [online] 13 November. Available at <http://www.chinadaily.com.cn/bizchina/2010-11/13/content_11545194.htm> [accessed on May, 12th 2012].
- Chao, J., 2004. *China Along Yellow River*. Shanghai, China: Shanghai Art Press.
- Chen, A. and Yang, Y., 2007. The construction of sustainable institution of certification and accreditation. *World standardization and quality management*, 11, pp. 54-56.
- Chen, B., 2012. Jiangcheng coffee shops. *Chutian Golden News*, [online] 1 March. Available at <http://www.topbiz360.com/web/html/analyitcs/restaurant/20120301/102532_2.html> [accessed on October, 1st 2012].

- Chen, J., 1998. Current problems and solutions of Chinese agriculture development. *The World of Survey and Research*, 2, pp. 15-18.
- Chen, J. and Yang, N., 2011. Urbanization to drive China's growth. *China Daily*, [online] 26 March. Available at <http://www.chinadaily.com.cn/business/2011-03/26/content_12231157.htm> [accessed on October, 10th 2012].
- Chen, L., Pohlan, J., Rieser, K. and Janssens, M., 2008. Latitude: an overlooked coffee quality factor. In ASIC (Association for Science and Information on Coffee), *22nd International Conference on Coffee Science*, Brazil, 14-19 September 2008, Brazil: ASIC. pp. 412-420.
- Chen X., 2008. The current problems of agriculture, village and farmers in China. *Sohu News*, [online] 20 February. Available at <http://news.sohu.com/20080220/n255260676.shtml> [accessed on May, 6th 2012].
- Chen, X., 2000. The key points of strategic structure adjustment in current agricultural and rural economy. *Shanghai Rural Economy* 1, pp. 11-14.
- Chen, Y., 2009. *How to open a coffee shop*. Beijing, China: People Post Press.
- Chen, Z., 1977. Upper camp: a study of a Chinese mixed-cropping village in Taiwan. Taipei, Taiwan: Institute of Ethnology, Academia Sinica.
- Chen, Z., 1998. Interior weakness of township enterprises development in China. *China Reform* 3, pp. 31-34.
- Chen, Z., 2003. *Food Quality Management*. Beijing, China: China Agriculture University Press.
- Chen, Z., 2005. Coffee Market and Development Trend in Shanghai. *Delicious Food Journal* 3, pp. 6-10.
- Cheng, T., 2003. *The research about Chinese farmers' systematization*. Tianjin, China. Tianjin Press.
- China Business Newspaper, 2010. The irrigation debt for Baoshan. [online] Available at <http://www.cb.com.cn/1634427/20100329/114134_2.html>. Accessed on [June, 6th 2013].
- China International E-Business Centre, 2010. *Beijing Times*. [online] Beijing, China. Available at <http://epaper.jinghua.cn/html/2010-11/25/content_606319.htm> [accessed on May, 12th 2012].
- China State Council, 1985. Ten rural economic promotion policies of China State Council. [online] Beijing, China: State Council. Available at <<http://finance.people.com.cn/GB/8215/135583/8145899.html>> [accessed on March, 26th 2012].
- Chinese Academy of Social Sciences, 2012. *Report on overall competitiveness of China's provincial economy during the 11th five years program*. [online] Beijing, China: CASS. Available at <http://news.yninfo.com/yn/jjxw/201203/t20120301_1760409.htm> [accessed on May, 12th 2012].

- Chinese Communist Party Central Committee, 1982. *National Rural Work Conference Summary*. [online], Beijing: Central Committee of the Communist Party of China. Available at <http://www.china.com.cn/aboutchina/data/zgncggkf30n/2008-04/09/content_14684460.htm> [accessed on April, 21st 2012].
- Chinese Communist Party Central Committee, 2008a. *Ten agricultural documents of Communist Party Central Committee and State Council*. Beijing, China: People Press.
- Chinese Communist Party Central Committee, 2008b. *Important decisions for rural development in China*. [online] Beijing: Central Committee of the Communist Party of China. Available at <http://www.gov.cn/jrzg/2008-10/19/content_1125094.htm> [accessed on March, 26th 2012].
- Chinese Communist Party Central Committee and State Council, 1993. *Several policies about agricultural and rural economic development*. [online] Beijing: Central Committee of the Communist Party of China and State Council. Available at <<http://cpc.people.com.cn/GB/64162/64165/72301/72306/4981197.html>> [accessed on December, 28th 2012].
- Chinese Communist Party Central Committee and China State Council, 1995. *The Opinions about Agricultural and Rural Work in 1995*. [online], Beijing: Central Committee of the Communist Party of China and State Council. Available at <http://law.lawtime.cn/d625286630380_1_p1.html> [accessed on March, 26th 2012].
- Chinese Communist Party Central Committee and China State Council, 1998. *The Opinions about Agricultural and Rural Work in 1998*. [online], Beijing: Central Committee of the Communist Party of China and State Council. Available at <http://www.gsei.com.cn/html/zgfg_567_11501.html> [accessed on March, 26th 2012].
- Clay, J., 2004. *World Agriculture and the Environment*. Island Press, Washington DC, U.S.A.
- Clifford, M. and Willson, K., 1985. *Coffee. Botany, Biochemistry and Production of Beans and Beverage*. London, UK: Croom Helm.
- Cloud-South, 2008. *Prefectures of Yunnan Province Southwest China*. [online] Available at <<http://www.cloud-south.com>> [accessed on April, 20th 2008].
- CNN, 2011. Hyper-Caffeinated coffee prices hit 14-year high. [online] Available at <http://money.cnn.com/2011/02/18/markets/coffee_price/index.htm> [accessed on May, 13th 2012].
- Coleman, J., 1988. Social capital in the creation of human capital. *American Journal of Sociology*. 94, pp. 95-120.
- Coleman, J., 1990. *Foundations of Social Theory*. Cambridge, USA. Harvard University Press.

- Constitution of the People's Republic of China, 2004. Article 48, 1st section. [online] Available at <http://www.gov.cn/gongbao/content/2004/content_62714.htm> [accessed on October, 25th 2012].
- Communist Party Central Committee, 2008. *Ten agricultural documents of Communist Party Central Committee and State Council*, People Press, Beijing, China.
- Communist Party Central Committee and State Council, 1993. Several Policies about Agricultural Economy and Rural Area Development. [online] Available at <<http://cpc.people.com.cn/GB/64162/64165/72301/72306/4981197.html>> [accessed on December, 14th 2012].
- Co-ops Integrity Certification Centre, 2011. The cooperation with FLO. [online] Available at <http://www.co-ic.com/?optionid=408&auto_id=141> [accessed on August, 4th 2012].
- Coste, R., 1992. *Coffee: the plant and the Product*. London and Basingstoke, UK: Macmillan.
- Cusack, T., 1999. Social capital, institutional structures, and democratic performance. *European Journal of Political Research* 35 (1), pp. 1-34.
- Daviron, B. and Ponte, S., 2005. *The coffee paradox*. London UK: Zed Books.
- Dazhangshan Organic Food Co., Ltd., 2012. [online] Available at <<http://www.dazhangshan.com/english/us.htm>> [accessed on August, 4th 2012].
- Dazhangshan Organic Tea Farmer Association, 2012. [online] Available at <<http://www.dazhangshan.com/english/flo.htm>> [accessed on August, 4th 2012].
- Department of Land Resources of Yunnan Province, 2005. *Yunnan Land Use and Transformation report in 2005*, unpublished paper.
- Descroix, F. and Wintgens, J. N., 2004. Establishing a coffee plantation. In: J. N. Wintgens, ed. 2004. *Coffee Growing, Processing, Sustainable Production. A guidebook for growers, processors, traders and researchers*. Weinheim, Germany: Wiley-VCH.
- Ding, T., 2010. Nestlé cooperates with farmers for coffee plantation in Pu'er China. *Global Entrepreneurs*, [online] 09 July. Available at <http://finance.qq.com/a/20100709/006345_1.htm> [accessed on May, 12th 2012].
- Donaldson, J., 2007. The state, the market, economic growth and poverty in China. *Politics and Policy* 35 (4), pp. 898-929.
- Dong, X., 1996. Two-tier land tenure system and sustained economic growth in post-1978 rural China. *World Development* 24 (5), pp. 915-928.
- Du, Y., 1997. The group characteristics and macro-background of current Chinese rural labor migration. *Chinese Rural Economy* 6, pp. 11-16.

- Du, Q., 2003. *Press conference for agricultural and rural work*. [online] *CCTV News* Available at <<http://www.forestry.gov.cn/portal/jjlx/s/1964/content-182988.html>> [accessed on May, 14th 2012].
- Duan, X., Li, Y. and Sun, X., 2002. The Structure of Kunming Quasi-Stationary Front. *Plateau Meteorology Magazine* 21 (2), pp. 6-19.
- Ebel, B., 2001. *Qualitätsmanagement*. Herne Druckerei, Berlin, Germany: Neue Wirtschaftsbriefe.
- Eberl, P., 2004. The development of trust and implications for organizational design. *Schmalenbachs Business Review* 56, pp. 258-273.
- Eberl, P. and Kabst, R., 2010. *Vertrauen, Opportunismus und Kontrolle. Management von Netzwerkorganisationen*. Wiesbaden, Germany: Gabler.
- Ellickson, R., 1991. *Order without law*. Cambridge, USA: Harvard University Press.
- Ellis, N. and Ybema, S., 2010. Marketing identities. *Organization Studies* 31 (3), pp. 279-289.
- Endruweit, G., 2004. *Organisationssoziologie*. Stuttgart, Germany: Lucius & Lucius.
- Esser, H., 1989. Verfällt die soziologische Methode? *Soziale Welt* 40 pp. 57-75.
- Euromonitor International, 2008. *Country Sector Briefing Coffee – China* May 2008 Sales by coffee type in China in 2007. [e-journal] Available through <<http://www.businessmonitor.com>>.
- Euromonitor International, 2010. *China Food & Drink Competitive Intelligence Report 2010*, pp. 1-31. [e-journal] Available through <<http://www.businessmonitor.com>>
- Euromonitor International 2011. *China Food and Drink Report Q1 2011*, pp. 1-32. [e-journal] Available through <<http://www.businessmonitor.com>>
- Eymard-Duvernay, F., 1995. La negociation de la qualite. In: Valceshini, E., Nicolas F., eds. *Agro-alimentaire: une economie de la qualite*. France: INRA Economica, 45.
- Fair Network of Asian Producers, 2012. [online]. Available at <<http://www.fairtradenap.net/china-jiangxi/>> [accessed on August, 4th 2012].
- Fair Trade Advocacy Office, 2011. *Strategic plan 2011-2015*. [online] Brussels, Belgium: FTAO. Available at <<http://www.fairtrade-advocacy.org>> [accessed on May, 21st 2012] pp.3-5.

- Fairtrade Foundation, 2007. *Sainsbury's announces further product ranges to switch to Fairtrade*. [online] London, UK: FTF. Available at <http://www.fairtrade.org.uk/press_office/press_releases_and_statements/archive_2007/oct_2007/sainsburys_announces_further_product_ranges_to_switch_to_fairtrade.aspx> [accessed on July, 30th 2012].
- Fairtrade Foundation, 2009. *The global food crisis and Fairtrade*. [pdf] London, UK: FTF. Available at <http://www.fairtrade.org.uk/includes/documents/cm_docs/2009/f/ft_executive_summary.pdf> [accessed on October, 21st 2012].
- Fairtrade Foundation, 2010a. *Annual report and financial statements 2009*. [pdf] London, UK: FTF. Available at <http://www.fairtrade.org.uk/includes/documents/cm_docs/2010/a/annual_report_and_financial_statements_2009.pdf> [accessed on October, 21st 2012].
- Fairtrade Foundation, 2010b. *Nestlé's Kit Kat announcement*. [online] London, UK: FTF. Available at <http://www.fairtrade.org.uk/press_office/kitkatannouncement.aspx> [accessed on July, 30th 2012].
- Fairtrade Foundation, 2011. *Annual Review 2009/2010*. [pdf] London, UK: FTF. Available at <http://www.fairtrade.org.uk/includes/documents/cm_docs/2010/f/ft_annual_review_2010_amend.pdf> [accessed on October, 22nd 2012].
- Fairtrade Foundation, 2012a. *Annual Review 2010/2011*. [online] London, UK: FTF. Available at <<http://fairtrade.clikpages.co.uk/annualreview2011/>> [accessed on October, 21st 2012].
- Fairtrade Foundation, 2012b. *Reports and Briefing papers*. [online] Available at <http://www.fairtrade.org.uk/resources/reports_and_briefing_papers.aspx> [accessed on October, 21st 2012].
- Fairtrade International, 2012. Facts and figures. [online] Available at <http://www.fairtrade.net/facts_and_figures.html> [accessed on August, 4th 2012].
- Fairtrade Labeling Organisation, 2004. Bonn, Germany: FLO [online]. Available at <<http://www.fairtrade.net/sites/aboutflo/aboutflo.html>> [accessed on October, 21st 2012].
- Fairtrade Labeling Organisation, 2009. *Generic fairtrade standards*. Bonn, Germany, FLO [online]. Available at <www.fairtrade.net> [accessed on October, 10th 2010].
- Fairtrade New Zealand, 2012. *Global Fairtrade sales rise by 12% on year*. [online] Auckland, New Zealand: FT NZ. Available at <<http://www.fairtrade.org.nz/news/global-fairtrade-sales-rise-12-year-nz-increase-24>> [accessed on July, 31st 2012].
- Fairtrade Towns Organisation, 2012. [online] Available at <<http://www.fairtradetowns.org/>> [accessed on August, 1st 2012].

- Fan, H., 2007a. The implications of American agricultural quality and security certification system for our country. *World Agriculture* 9, pp. 39-41.
- Fan, H., 2007b. The application and discussion of retroactive system in the food supply chain. *Ecological Economics* 4, pp. 63-65.
- Fang, M., 2010. The reduction of coffee productivity caused by drought. *Yunnan Coffee News*. [online] 27 April. Available at <<http://news.163.com/10/0427/11/659A4BH500014AEE.html>> [accessed on May, 13th 2012].
- FAO, 2012. FAOSTAT Trade Statistics. [online] Available at <<http://faostat.fao.org/site/342/default.aspx>> [accessed on May, 13th 2012].
- FCCD Project Report, 2006. GaoLiGongshan communities research, Science Press, Beijing, China.
- Fei, X., 2007. *Rural China*. Shanghai, China: Shanghai People Press. pp. 9-10.
- Financial Ministry, 1996. Financial Rules in Village Economic Organizations. [online] Beijing, China. Available at <<http://www.law-lib.com/lawhtm/1996/12245.htm>> [accessed on August, 2nd 2012].
- FLO-CERT GmbH, 2012. Bonn, Germany: FLO-CERT [online]. Available at <<http://www.flo-cert.net/flo-cert/>> [accessed on October, 21st 2012].
- Fukuyama, F., 2001. Social capital, civil society and development. *Third World Quarterly* 22 (1), pp. 7-18.
- Gao, L. and Zhang, L., 2008. The situation and achievement of water cooperative organized by voluntary farmers and households. *Problems of Agricultural Economy* S1, pp. 127-131.
- General Administration of Quality Supervision, China 2003. Food quality and security supervision rules. [online] Beijing, China. Available at <<http://baike.baidu.com/view/439113.htm>> [accessed on August, 2nd 2012].
- General Administration of Quality Supervision, China 2004. Organic Product Certification Regulation, Item 2. [online] Beijing, China. Available at <<http://baike.baidu.com/view/439174.htm?fr=aladdin>> [accessed on August, 3rd 2012].
- Geng, Y., 2008. The interrelationship between rural labour transference and new rural construction. *Decision-making Journal* 4, pp. 6-17.
- Giddens, A., 1995. *Die Konstitution der Gesellschaft*. Frankfurt am Main/Germany: Campus.
- Giovannucci, D. and Koekoek, F., 2003. The State of Sustainable Coffee: A Study of Twelve Major Markets. [pdf] Cali, Colombia: Social Science Research Network. Available at <http://www.iisd.org/pdf/2003/trade_state_sustainable_coffee.pdf> [accessed on December, 27th 2013].

- Gittel, R. and Vidal, A., 1998. *Community organizing*. Thousand Oaks, USA: Sage Publications.
- GIZ (Deutsche Gesellschaft für Internationale Zusammenarbeit), 2012. Fair trade. Frankfurt, Germany. [online] Beijing, China. Available at <<http://www.giz.de/Themen/en/SID-0985789D-A2ACDB71/7239.htm>> [accessed on August, 3rd 2012].
- Gong, Zh., 2005. Farmers water cooperative and rural development. *Comparison of Economic and Social Systems Journal* 4, pp. 74-80.
- Gonzalez, A., 2002. *Evaluation of the current and potential poverty alleviation benefits of participation in the fair trade market: the case of Union La Selva*. [pdf] Available at <<http://welcome2.libarts.colostate.edu/centers/cfat/wp-content/uploads/2009/09/Case-Study-Uni%C3%B3n-La-Selva-Chiapas-Mexico.pdf>> [accessed on August, 23rd 2013].
- Goode, W., 1964. *The family*. New Jersey, USA: Prentice-Hall.
- Google Yunnan Map, 2012. Google Search Machine. [online] Available at <http://kangyunfriends.org/projects/Pingbian/Yunnan_map.jpg> [accessed on August, 3rd 2012].
- Granovetter, M., 1995. The Economic Sociology of Firms and Entrepreneurs. In: A. Pottes, ed., *The Economic Sociology of immigration: Essays on Networks, Ethnicity and Entrepreneurship*, 1995. New York, USA: Russell Sage Foundation.
- Grootaert, C. and Bastelaer, T., 2002. *Understanding and measuring social capital*. Washington, D. C., USA: The World Bank.
- GTZ, 2002. *General report on urban poverty research in Yunnan province*. Beijing, China: China Social Sciences Press,.
- GTZ, 2005: Reader: participatory approaches. [pdf] Available at <<http://www.gtz.de/de/dokumente/en-participatory-approaches-reader-2005.pdf>> [accessed on April, 25th 2012].
- Gu, S. and Li, Z., 1998. Top-down analysis about urban institution in China. *Social Science in China* 2, pp. 60-65.
- Guo, D. and Jiang, W., 2004. Factor analysis about farmers' participation behavior in specialized economic organization. *Chinese Rural Economy* 5, pp. 10-16.
- Han, J., Qin, Z., Zhang, Y., Luo, D., 2006. The evaluation of preferential policies for farmers' cooperative development. *Investigation and Research Report* 146, pp. 1-24.
- Han, P., 2010. *Soziologie der Migration*. Stuttgart, Germany: Lucius & Lucius.
- Han, X. and Li, J., 2003. The increase of farmers' income by farmers' systematization. *Forward Position in Economics* Z01, pp. 18-22.

- Hanifan, L., 1916. The rural school community center. *Annals of the American Academy of Political and Social Science* 67, pp. 130-138.
- He, M. and Zhong, L., 2007. Christian religion in rural minority village. *Academic Exploration Journal* 5, pp. 107-112.
- He, X., 2003. *New rural China*. Nanning, China: Guangxi University Press.
- He, X., 2008. *What is Countryside and What is Its Problem*. Beijing, China: Law Press, pp. 147-153.
- He, X., 2009. *Village governance model: several case studies*. Jinan, China: Shandong People Press.
- He, X., 2010. *The logic of land right*. Beijing, China: China Finance and Law University Press.
- He, X. and Wei, H., 2010. Ten dialectical relationships in current rural problems. *Theoretical Horizon* 3, pp. 38-41.
- Herrera, J., Combes, M., Anthony, F., Charrier, A. and Lashermes, P., 2002. Introgression into the allotetraploid coffee: segregation and recombination of *C. Canephora* genome in the tetraploid interspecific hybrid (*C. Arabica* x *C. Canephora*). *Theoretical and Applied Genetics* 104: pp. 661-668.
- Hinton, W. H., 1991. *The Privatization of China: The Great Reversal*. London, UK: Earthscan Publications.
- Hoefert, H., 1994. *Der Mensch in der Organisation*. 4th edition. Auflage, Giessen, Germany: Schmidt.
- Hoefstede, G., 2001. *Culture's consequences*. Thousand Oaks, USA: Sage Publications.
- Hu, L., 2012. Interview with Yunnan Coffee Guild. [online] Available at <http://www.yncoffee.net/_d275648941.htm> [accessed on January, 3rd 2012].
- Hu, R., 2009. The warning sign about the wealth allocation in China. *Jinan Daily* [online] 25 February. Available at <<http://news.163.com/10/0225/04/60BGC7J4000120GR.html>> [accessed on December, 14th 2012].
- Hu, Y., 1998. Element productivity rates in China. *Economic Research Journal* 3, pp. 31-44.
- Huang, G., 2001. Redefinition of agricultural modernization. *Research of Agricultural Modernization* 1, pp. 48-53.
- Huang, H., 2001. Research on the institutions of the landownership in the rural areas of China. *Modern Law Science* 4, pp. 116-120.
- Huang, T. and Huang H., 2009. The marketing strategy and characteristics of SPR Coffee. *Management Science* 3, pp. 56-58.
- Huang, Z. and Bai, Z., 2008. The main problems and improvement advices for sugar industry in Baoshan. *Sugarcane Journal* 5, pp. 50-53.

- ICO, 2012a. Physical properties of coffee. [online] Available at <<http://www.ico.org/ecology.asp#phy>> [accessed on May, 13th 2012].
- ICO, 2012b. Consumer oriented vocabulary for coffee. [online] Available at <<http://www.ico.org/vocab.asp>> [accessed on May, 13th 2012].
- ICO, 2012c. [online] Available at <<http://www.ico.org/prices/p1.htm>> [accessed on May, 13th 2012].
- ICO, 2012d. [pdf] Available at <<http://dev.ico.org/documents/icc-105-17e-rules-indicator-prices.pdf>> [accessed on May, 13th 2012].
- ICO, 2012e. World production by type: Arabica and Robusta. [online] Available at <<http://www.intracen.org/coffee-guide/world-coffee-trade/world-production-by-type-arabica-and-robusta/>> [assessed on January, 2nd 2012].
- Illy, F., 1992. *The Book of Coffee: A Gourmet's Guide*. New York, USA: Abbeville Press.
- International Standards Office (ISO), 2012. [online] Geneva, Switzerland: ISO. Available at <<http://www.iso.org/iso/home/standards/certification.htm>> [accessed on August, 2nd 2012].
- Jia, D. and Ge, W., 2007. National Teeth Protection Group. [online]. Available at <<http://news.qq.com/a/20070526/000225.htm>> [accessed on January, 4th 2012].
- Jiang F., 1995. Institutional and agriculture modernization with Chinese characteristics. *Jianghai Research Journal* 5, pp. 29-33.
- Jiang, Z. and Chen, Q., 2004. China food security certification situation and development research. *Technical Management Research* 1, pp. 8-14.
- Jiang, Z., 1996. The letter for national council of representatives of China. *Supply and Marketing Co-operative' Economy and Science* 04, pp. 1-11.
- Jin, Q. and Li, W., 1992. China's rural settlement patterns. In: R. Knapp, 1992. *Chinese Landscapes: the village a place*. USA Honolulu: University of Hawaii Press. pp. 13-34.
- Jin, T., 2008. *The Administration and the Structure of Rights in Villages*. Guangzhou, China: Guangdong People Press.
- Jopson, B. and Hook, L., 2011. Starbucks to Expand Role in Chinese Coffee. *Financial Times*. [online] 15 July. Available at <<http://www.ft.com/cms/s/0/2f5dda00-ae9-11e0-9310-00144feabdc0.html#axzz1uSoO2ifG>> [accessed on May, 9th 2012].
- Kelliher, D., 1992. *Peasant Power in China: The Era of Rural Reform, 1979-1989*. New Haven, USA: Yale University Press.
- Khan, A. R. and Riskin, C., 2001. *Inequality and Poverty in China in the Age of Globalization*. New York, USA: Oxford University Press.

- Kiemen, A. and Beuchelt, T. 2010. Certification as an upgrading strategy for small-scale farmers and their cooperatives. [online] Available at <http://ageconsearch.umn.edu/handle/122652> [accessed on August, 23rd 2013].
- Kieser, A. and Walgenbach, P. 2007. *Organisation*. 3rd edition, Stuttgart, Germany: Schaeffer-Poeschel.
- Kipnis, A. B., 1997. *Producing Guanxi: Sentiment, Self, and Subculture in a North China Village*. Durham, USA: Duke University Press.
- Knight, J. and Song, L., 1999. *The rural-urban divide: Economic disparities and interactions in China*. New York, USA: Oxford University Press.
- Kong, X., 2011. Governmental policies for the development of farmers' cooperative. *China Co-operation Economy* 1, pp. 30-34.
- Kong, X., Shi, B., 2008. The institutional transformation and police evaluation of Chinese farmers' economic association development. *Management and Administration of Rural Cooperative* 11, pp. 28-32.
- Krier, J.-M., 2008. *Fair Trade 2007*. [pdf] Colemborg, Netherlands: The Dutch Association of Worldshops. Available at <www.european-fair-trade-association.org/efta/Doc/FT-E-2007.pdf> [accessed on October, 21st 2012].
- Krishna, A. and Uphoff, N., 1999. Mapping and measuring social capital. Washington, DC: World Bank. [online] Available at <<http://site.resources.worldbank.org/INTSOCIALCAPITAL/Resources/Social-Capital-Initiative-Working-Paper-Series/SCI-WPS-13.pdf>> [accessed on March, 15th 2013].
- Kunming Daily, 2012. The coffee price reaches a new low point. *Kunming Daily* [online] 4th December 2012. Available at <<http://yn.people.com.cn/finance/news/n/2012/1204/c228596-17810377.html>> [accessed on June, 6th 2013].
- Künne, W., 1979. *Die Auswanderung jugoslawischer Arbeitskräfte: Ein Beitrag zur Analyse internationaler Arbeitskräftewanderungen*. Köln, Germany: Hanstein Verlag.
- Labour behind the label, 2010. LIDL: Forced to Retract 'Ethical' Claims. [online] Bristol, UK: Labour behind the label. Available at <<http://www.labourbehindthelabel.org/news/item/821-LIDL-legal-action>> [accessed on July, 31st 2012].
- Lahno, B., 2002. *Der Begriff des Vertrauens*. Paderborn, Germany: Mentis.
- Lang, O., 1946. *Chinese family and society*. New Haven. USA: Yale University Press.
- Lang, R. and Alt, R., 1996. Handlungsspielraum des ostdeutschen Managements im Umbruch. In: D. Sadowski, H. Czap, and H. Wächter eds., 1996. *Regulierung und Unternehmenspolitik*. Wiesbaden, Germany: Gabler.

- Lanna Cafe, 2008. *Marketing research in Shenzheng, China*. [online] Available at <<http://doc.mbalib.com/view/4e08aafe0032c1dee38742b23102abae.html>> [accessed on May, 12th 2012].
- Law of Succession of the People's Republic of China, 1995. Article 9. [online] Available at <<http://laws.66law.cn/law-80417.aspx>> [accessed on October, 28th 2012].
- Lee, E., 1966. A theory of migration. *3 Demography* 47, pp. 49-56.
- Lee, S., 2011. Coffee market brief update. [pdf] USDA Foreign Agricultural Service, GAIN Report Number: KS1109. Available at <http://gain.fas.usda.gov/Recent%20GAIN%20Publications/Coffee%20Market%20Brief%20Update_Seoul%20ATO_Korea%20-%20Republic%20of_2010-12-09.pdf> [accessed on December, 28th 2012].
- Lei, J., 2004. Discussion about pollution-free food. *Journal of Agricultural Environment and Development* 3, pp. 2-9.
- Li, B., 2010. China International E-Business Centre. *Beijing Times* [online] 25 November. Available at <<http://jingji.cntv.cn/20101125/103675.shtml>> [accessed on January 4th 2013].
- Li, G., Rozelle, S. and Brandt, L., 1998. Tenure, land rights and farmer investment incentives in China. *Agricultural Economics* 19, pp. 1-17.
- Li, H., 2011. The problems and solutions for sugar industry in Yunnan. *Current Economics* 15: pp. 82-85.
- Li, J., 2012. Starbucks: constant development in China. *The First Financial Daily* [online] 10 February. Available at <<http://www.yicai.com/news/2012/02/1414082.html>> [accessed on May, 12th 2012].
- Li, R. and Chou, A., 2006. How to improve the supervision efficiency for certification. *China Quality Technique Supervision* 12, pp. 40-42.
- Li, Y., 2002. *Society structure, value system and character formulation*. Shanghai Education Press: Shanghai, China.
- Li, Y., 2009. The law discussion about the member right in collective economic entity. *Rural Economy* 7, pp. 126-131.
- Lin, J., 1992. Rural reforms and agricultural growth in China. *American Economic Review*, 82 (1), pp. 34-51.
- Lin, N., 2001. *Social capital: a theory of social structure and action*. Cambridge, UK: Cambridge University Press.
- Linton, A., 2007. Partnering for sustainability: Business-NGO alliances in the coffee. *Development in Practice*, 15 (3) & (4), pp. 601-612.
- Liu, W., 2004. Reason analysis of low farmers' systematization. *Journal of The Party School of CPC Ningbo Municipal Committee* 5, pp. 68-73.
- Loureiro, M. and Lotade, J., 2005. Do fair trade and eco-labels in coffee wake up the consumer conscience? *Ecological Economics* 53, pp. 129-134.

- Loury, G., 1992. The economics of discrimination: getting to the core of the problem. *Harvard Journal for African American Public Policy* 1, pp. 100-111.
- Lu, J., 2007. *Development research in Lisu community*. Beijing, China: China Social Science Press.
- Lu, W., 1998. The rural development pathway with Chinese characteristics. *Problems of Agricultural Economy* 10, pp. 2-9.
- Lu, X., 2009. Middle Class Occupies about 23% of China's Population. Xinhua Net [online] Interview available at <http://news.xinhuanet.com/politics/2009-08/17/content_11894452.htm> [accessed on May, 9th 2012].
- Luhmann, N., 1979. *Trust and power*. Chichester, Canada: Wiley.
- Luhmann, N., 1989, *Vertrauen. Ein Mechanismus der Reduktion sozialer Komplexität*. 3rd ed. Stuttgart, Germany: UTB.
- Luo, B., 2002. *Agriculture industrial organization: evolution, comparison and innovation*. Beijing, China: China Economy Press.
- Luo, B., 2004. The Guidance about national agricultural products. *Agricultural Quality Standard* 3, pp. 14-18.
- Luo, X., Zhu, N., 2008. *Rising income inequality in China*. [pdf] The World Bank, Policy Research Working Paper 4700. Available at <<http://library1.nida.ac.th/worldbank/fulltext/wps04700.pdf>> [accessed on April, 25th 2012].
- Lyon S., 2002. *Evaluation of the actual and potential benefits for the alleviation of poverty through participation in fair trade coffee networks: Guatemalan case study*. [pdf] Available at <<http://welcome2.libarts.colostate.edu/centers/cfat/wp-content/uploads/2009/09/Case-Study-Guatemala.pdf>> [accessed on August, 30th 2013].
- Ma, R., 2012. The cooperation between Starbucks and local coffee companies. *China Financial Times* [online] 16 February 2012. Available at <<http://finance.sina.com.cn/roll/20120216/000111386191.shtml>> [accessed on May, 12th 2012].
- Mao, X., 2004. The non-agricultural transformation of farmers in the urbanization process. *Journal of Shenzhen University* 4, pp. 70-73.
- Masaba, M., 2000. Coffee Physiology and Breeding. *Review of Kenyan Agriculture Research* 25.
- McClenaghan, P., 2000. Social Capital: Exploring the theoretical foundations of community development education. *British Educational Research Journal* 26 (5), pp. 582-592.
- McDowall H., Humphreys. J. and Conlon J., 2011. A new Fair Trade registration scheme based on the relations of production. *Development in Practice*. 21 (2), pp. 149-165.

- McMillan, J., Whalley, J. and Zhu, L., 1989. The impact of China's economic reforms on agricultural productivity growth. *Journal of Political Economy* 97 (4), pp. 781-807.
- Mead, R., 2003. A revisionist view of Chinese agricultural productivity? *Contemporary Economic Policy* 21 (1), pp. 117-131.
- Mendez VE., 2002. Fair Trade networks in two coffee cooperatives of western El Salvador. [pdf] Colorado State University/DESAL/Ford Foundation. Available at <<http://welcome2.libarts.colostate.edu/centers/cfat/wp-content/uploads/2009/09/Case-Study1-El-Salvador.pdf>> [accessed on August, 23rd 2013].
- Meng, Z., 2003. The transference problems of rural labours in urbanization process. *Investigation and Seeking Truth* Z1, pp. 66-79.
- Ministry of Commerce of China, 2012. [online] Available at <<http://www.mofcom.gov.cn/aarticle/difang/yunnan/201203/20120308034605.html>> [accessed on March, 15th 2013].
- Ministry of Finance and State Administration of Taxation, China 1994. *The Announcement of Sale Tax-Free for Certain Projects*. [online] Beijing, China. Available at <<http://www.js-n-tax.gov.cn/Page/StatuteDetail.aspx?StatuteID=1267>> [accessed on April, 11th 2012].
- Ministry of Finance and State Administration of Taxation, China 1995. *The Explanation of Tax Scope of Agricultural Products*. [online] Beijing, China. Available at <<http://www.js-n-tax.gov.cn/Page1/StatuteDetail.aspx?StatuteID=1477>> [accessed on March, 27th 2012].
- Ministry of Finance and State Administration of Taxation, China 2008. The Announcement of relevant Tax Policies about Farmers' Cooperative. [online] Beijing China. Available at <<http://www.mofcom.gov.cn/aarticle/b/g/200810/20081005836617.html>> [accessed on March, 20th 2012].
- Ministry of Land and Resources, China, 2005. [online] Beijing China: MLR. Available at <http://www.gov.cn/jrzg/2006-04/11/content_251427.htm> [accessed on April, 21st 2012].
- Ministry of Land and Resources, China, 2005. Beijing China: MLR. China Land Use and Transformation Report in 2005, unpublished paper.
- Müller, H.-P., 1992. *Sozialstruktur und Lebenswelt. Der neuere theoretische Diskurs ueber soziale Ungleichheit*. Frankfurt am Main, Germany: Suhrkamp.
- Murray, D., Raynolds, L. and Taylor, P., 2003. One cup at a time: Poverty alleviation and fair trade coffee in Latin America. [pdf] Available at <<http://welcome2.libarts.colostate.edu/centers/cfat/wp-content/uploads/2009/09/One-Cup-at-a-Time.pdf>> [accessed on August, 4th 2012].
- Murray, D., Raynolds, L. and Taylor P., 2006. The future of Fair Trade coffee. *Development in Practice* 16 (2), pp. 179-192.

- Nanjing Organic Products Certification Centre, 2012. Centre Introduction. [online] Available at <<http://baike.baidu.com/view/3645776.htm>> [accessed on August, 3rd 2012].
- Narayan, D. and Pritchett, L. 1997. Cents and sociability: Household income and social capital in rural Tanzania. Washington, DC: World Bank. [online] Available at <http://papers.ssrn.com/sol3/papers.cfm?abstract_id=604937> [accessed on March, 15th 2013].
- Narayan, D., 1999. *Bonds and bridges: social capital and poverty*. [pdf] Washington, USA: The World Bank. Available at <<http://info.worldbank.org/etools/docs/library/9747/narayan.pdf>> [accessed on October, 23rd 2012].
- National People's Congress, China, 2002a. *China Rural Land Contract Law*. [online] Beijing, China. Available at <<http://www.china.com.cn/chinese/PI-c/196651.htm>> [accessed on December, 28th 2012].
- National People's Congress, China, 2002b. *Agriculture Law*. [online] Beijing, China. Available at <http://www.china.com.cn/law/flfg/txt/2006-08/08/content_7064353.htm> [accessed on December, 28th 2012].
- National People's Congress, China, 2004. Institutional Law. [online] Beijing, China: NPC. Available at <http://www.gov.cn/gongbao/content/2004/content_62714.htm> [accessed on December, 28th 2012].
- National Women Organization, 2008. National rural unattended children report. *Chinese Women's Movement* 6, pp. 34-44.
- Nestlé 2009. [online] Available at <<http://www.Nestle.com.cn>> [accessed on May, 12th 2009].
- Neubauer, W. and Rosemann, B., 2006. *Führung, Macht und Vertrauen in Organisationen*. Stuttgart, Germany: Kohlhammer.
- Niu, R., 1999. The right understanding of agricultural modernization. *Issues in Agricultural Economy* 10, pp. 13-24.
- Niu, R., 2002. The development features and direction of Chinese agricultural industrialization. *China Rural Economics Journal* 5, pp. 5-12.
- Njoroge, J., 1998. Agronomic and processing factors affecting coffee quality. *Outlook on agriculture* 27 (3), pp. 163-166.
- Nooteboom, B., 2002. *Trust: Forms, Foundations, Functions, Failures and Figures*. Cheltenham, UK: Edward Elgar.
- OECD, 2005. *Agricultural policy reform in China*. [pdf] Paris, France: OECD. Available at <<http://www.oecd.org/dataoecd/3/48/35543482.pdf>> [accessed on May, 6th 2012].
- OECD, 2010. *Urbanization, Hukou system and government land ownership*. [pdf] Paris, France: OECD. Available at <<http://www.oecd.org/dev/perspectivesonglobaldevelopment/44772487.pdf>> [accessed on October, 10th 2012].

- OECD, 2012a. *Glossary of statistical terms – Quality ISO*. [online] Paris, France: OECD. Available at <<http://stats.oecd.org/glossary/detail.asp?ID=5150>> [accessed on August, 4th 2012]
- OECD, 2012b. *Glossary of statistical terms – Quality OECD*. [online] Paris, France: OECD. Available at <<http://stats.oecd.org/glossary/detail.asp?ID=5163>> [accessed on August, 4th 2012].
- Oelofse, M., et al., 2010. Certified organic agriculture in China and Brazil. *Ecological Economics* 69, pp. 1784-1797.
- Oi, J.C., 1989. *State and peasant in contemporary China: the political economy of village government*. Berkeley, USA: University of California Press.
- Ortmann, G., 1994, 'Lean'. Zur rekursiven Stabilisierung von Kooperation. In: G. Schreyögg and P. Conrad eds. *Managementforschung 4*, Berlin, Germany: Walter de Gruyter & Co.,.
- Ortmann, G., Windeler, A., Becker, A. and Schulz, H.-J., 1990. *Computer und Macht in Organisationen: Mikropolitische Analysen*. Opladen, Germany: VS Verlag für Sozialwissenschaften.
- Ostrom, E., 1994. Constituting social capital and collective action. *Journal of Theoretical Politics* 6: pp. 527-562.
- Ostrom, E., 1998. A behavioral approach to the rational choice theory of collective action. *American Political Science Review* 92 (1), pp. 1-22.
- Ostrom, E., 2002. *The Drama of the Commons*. Washington, DC, USA: National Academy Press.
- Ostrom, E. and Ahn, T., 2003. *Foundations of Social Capital*. Cheltenham, UK: Edward Elgar.
- Ostrom, E. and Walker, J., 2005. *Trust and reciprocity: Interdisciplinary Lessons for Experimental Research*. New York, USA: Russell Sage Foundation Publications.
- Oxford Policy Management, 2000. Fair trade: overview, impact, challenges. Oxford Policy Management and IIED, UK. [pdf] Available at <<http://portals.wi.wur.nl/files/docs/ppme/ACF3C8C.pdf>> [accessed on July, 31st 2012].
- Pan, W., 2000. The challenges for China in 21st century. *Economic Working Guide Periodical* 14, pp. 11-21.
- Pan, Y. and Chui, Y., 2009. The influences of rural migrant workers for new socialist countryside. *Theory Research* 27, pp. 164-167.
- Pearl, H., Nagai, C., Moore P., Steiger, D., Osgood, R. and Ming, R., 2004. Construction of a genetic map for Arabica coffee. *Theoretical and Applied Genetics* 108, pp. 829-835.
- Pelsmacker, P., Driesen, L. and Rayp, G., 2005. Do consumers care about ethics? Willingness to pay for Fair-trade coffee. *The Journal of Consumer Affairs* 39 (2), pp. 363-385.

- People's Bank of China, 2005. 2005 China financial performance report. [online] Beijing, China: People's Bank of China. Available at <<http://finance.sina.com.cn/g/20060526/1408712753.shtml>> [accessed on May, 7th 2012].
- People Congress Standing Committee, 2010. Village Election Law. [online] Available at <http://www.gov.cn/flfg/2010-10/28/content_1732986.htm> [access on May, 29th 2013].
- People Press, 2008. The economic reform in thirty years. [online] Available at <<http://theory.people.com.cn/GB/40537/7876878.html>> [accessed on February, 6th 2014].
- Petersen, W., 1958. A general typology of migration. *American Sociological Review* 23 (3), pp. 256-266.
- Pirotte, G., Pleyers, G. and Poncelet M., 2006. Fair-trade coffee in Nicaragua and Tanzania: a comparison. *Development in Practice*, 16 (5), pp. 441-451.
- Platon, 1974. *Der Staat*. S äntliche Werke. München, Germany: Artemis.
- Political Bureau of Communist Central Committee, China, 1983. *Several Issues of Current Rural Economic Policy*. [online] Beijing, China. Available at <http://www.china.com.cn/aboutchina/data/zgncggkf30n/2008-04/09/content_14684996.htm> [accessed on April, 20th 2012].
- Portes, A., 1998. Social capital: its origins and applications in modern sociology. *Annual Review of Sociology*, 24 pp.1-24.
- Project Inspection Report, 1999. GaoLiGongshan communities research, Science Press, Beijing, China, p.119.
- Project Evaluation Report, 2004. GaoLiGongshan communities research, Science Press, Beijing, China, pp.221-229.
- Pu, S., 2006. *The Introduction of New Rural Construction*. Beijing, China: China Sociology Press.
- Putnam, R., 1995. Bowling alone: American's declining social capital. *Journal of Democracy* 6 (1), pp. 65-78.
- Putnam, R., 2000. *Bowling alone*. New York, USA: Simon & Schuster Paperbacks.
- Qin, H., 2010. *The advantage of human right shortage for economic miracles*. [online] Available at <http://www.21ccom.net/articles/qqsw/qqgc/article_201005119237_3.html> [accessed on October, 18th 2012].
- Quiggin, J., 1997. Economic rationalism. *Crossings* 2 (1), pp. 3-12.
- Raina, S., Mukai, Y. and Yamamoto, M., 1998. In situ hybridization identifies the diploid progenitor species of Coffea Arabica. *Theoretical and Applied Genetics* 97, pp.1204-1209.
- Raynolds L., 2002. Consumer/producer links in fair trade coffee networks. *Sociologia Ruralis*, 42 (4), pp. 404-424.

- Raynolds, L. T., Murray, D. and Taylor, P. L., 2004. Fair Trade Coffee: Building producer capacity via global networks. *Journal of International Development* 16 (8), pp. 1109-1121.
- Rein, S., 2012. Why Starbucks Succeeds in China. *CNBC* [online] 30 January. Available at <http://www.cnbc.com/id/46186635/Rein_Why_Starbucks_Succeeds_in_China> [accessed on May, 12th 2012].
- Rempel, J., Holmes, J. and Zanna, M., 1985. Trust in close relationships. *Journal of Personality and Social Psychology* 49 (1), pp. 95-112.
- Renard, M. C., 2003. Fair Trade: quality, market and conventions. *Journal of Rural studies* 19 (1), pp. 87-96.
- Ronchi, L., 2002. *The impact of fair trade on producers and their organizations*. Poverty research unit working paper No.11. Brighton, UK: University of Sussex.
- Ronzani, S., 1980. *Arbeitskräftewanderung und gesellschaftliche Entwicklung: Erfahrungen in Italien, in der Schweiz und in der Bundesrepublik Deutschland*. Königstein, Germany: Anton Hain.
- Rotter, J., 1980. Interpersonal trust, trustworthiness and gullibility. *American Psychologist* 35 (1), pp. 1-7.
- Ruben, R., Fort R. and Zuniga-Arias, G., 2009. Measuring the impact of fair trade on development, *Development in Practice* 19 (6), pp. 777-788.
- Sanchatha M., 2010. Starbucks Plans Major China Expansion. *The Wall Street Journal* [online] 13 April. Available at <<http://online.wsj.com/article/SB10001424052702304604204575181490891231672.html>> [accessed on May, 11th 2012].
- Schweer, M. and Thies, B., 2003. *Vertrauen als Organisationsprinzip. Perspektiven für komplexe soziale Systeme*. Bern, Switzerland: Huber.
- Scott, D., 1980. Interpersonal trust: a comparison of attitudinal and situational factors. *Human Relations* 33 (11), pp. 805-812.
- Seifert, M. 2001. *Trust management in enterprise*. München, Germany: Rainer Hampp.
- Shaw, D. and Shiu, E., 2003. Ethics in consumer choice: a multivariate modelling approach. *European Journal of Marketing* 37 (10), pp. 1485-1498.
- Sheng, S., 2006. The problems of migrant workers' family cannot be ignored. *Inside China Journal* 4, pp. 17-22.
- Shi, G., 2011. The Exploitation of Consumption Market of Chinese Middle Class. *China Value* [online] 27 October. Available at <<http://www.chinavalue.net/Management/Blog/2011-10-27/849279.aspx>> [accessed on May, 9th 2012].

- Shipper, H., 2011. Nestlé to Double Investment in China Coffee Market. Market Watch. *The Wall Street Journal* [online] 18 November. Available at <<http://www.marketwatch.com/story/Nestle-to-double-investment-in-china-coffee-market-2011-11-18>> [accessed on May, 9th 2012].
- Sicular, T., 1995. Redefining state, plan and market: China's reforms in agricultural commerce. *The China Quarterly*, 144, pp. 1020-1046.
- Siebenbrock H., 2010. *Grundlagen der Organisationsgestaltung und -entwicklung*. Altenberge, Germany: Niederle Media.
- Silva, M. et al., 2006. Coffee resistance to the main diseases. *Brazilian Journal of Plant Physiology*, 18 (1), pp. 119-147.
- Sina News, 2006. Interview with president Hu. [online] Available at <<http://news.sina.com.cn/c/2006-04-20/15158748326s.shtml>> [accessed on June, 2nd 2013].
- Somerville, J., 2010. Interview about Chinese Coffee Market. *Global Entrepreneur* [online] 21 July. Available at <http://news.hexun.com/2010-07-21/124323507.html> [accessed on May, 12th 2012].
- Song, L., 2005. Coffee potential in Chinese market. *Industrial Focus* 9, pp. 33-37.
- Song, Y. and An, Y., 2011. Rural cooperative and common water resource provision. *Research on Economics and Management* 6, pp. 44-51.
- Standing Committee of National People's Congress, 2002. *China Rural Land Contract Law*. [online] Beijing, China. Available at <http://www.ln.gov.cn/zfxx/gjfl/jjfl/200804/t20080409_178622.html> [accessed on December, 27th 2012].
- Standing Committee of National People's Congress, 2004. *Land Management Law*. [online] Beijing, China. Available at <http://news.xinhuanet.com/newscenter/2004-08/29/content_1913155.htm> [accessed on December, 27th 2012].
- Standing Committee of National People's Congress, 2006. Farmers' Cooperative Law. [online] Available at <http://news.xinhuanet.com/fortune/2006-10/31/content_5273564.htm> [accessed on December, 14th 2012].
- State Council, 1998. The emergency announcement about the tobacco plantation and purchase in 1998. [online] Available at <http://www.110.com/fagui/law_4464.html> [accessed on June, 5th 2013].
- State Council China, 2003. *Certification and Accreditation Regulation*. [online] Beijing, China. Available at <http://www.gov.cn/zwgk/2005-05/23/content_176.htm> [access on January, 4th 2013].
- State Council China, 2006. *Food Security Law*. [online] Beijing, China. Available at <http://www.law-lib.com/law/law_view.asp?id=276770> [accessed on August, 2nd 2012].

- State Council China, 2012. State Council News Release Conference. *People Website News*. [online] 10 February. Available at <<http://politics.people.com.cn/GB/17076633.html>> [accessed on May, 12th 2012].
- State Ethnic Affairs Committee, China 2001. The family policy in ethnic areas. In: *Xinhua Press Net* [online] May 18. Available at <http://news.xinhuanet.com/zhengfu/2001-05/18/content_39036.htm> [accessed on June, 2nd 2013].
- State Statistics Bureau China, 2012. Farmer Income reaches 4,711 RMB in Yunnan. In: *China News* [online] 20 January. Available at <http://www.yn.chinanews.com/pub/2012/yunnan_0120/38906.html> [accessed on May, 12th 2012].
- Statista, 2013. Umsatz mit Fairtrade-Produkten weltweit. [online] Available at <<http://de.statista.com/statistik/daten/studie/171401/umfrage/umsatz-mit-fairtrade-produkten-weltweit-seit-2004/>> [accessed on December, 16th 2013].
- Starbucks, 2012a. *Greater China*. Available at <<http://news.starbucks.com/about+starbucks/starbucks+coffee+international/greater+china/>> [accessed on May, 18th 2012].
- Starbucks, 2012b. *Starbucks News*. Available at <http://news.starbucks.com/article_display.cfm?article_id=464> [accessed on May, 12th 2012].
- Starbucks, 2012c. *Starbucks und Fairtrade sind Partner seit mehr als 10 Jahren*. Available at <<http://www.starbucks.de/responsibility/learn-more/fairtrade>> [accessed on July, 30th 2012].
- Stecklow, S. and White, E., 2004. How fair is Fair Trade? That's tough to figure. *The Wall Street Journal* [online] 8 June. Available at <<http://online.wsj.com/article/SB108664937612931075.html>> [accessed on October, 23rd 2012].
- Sun, D., 2005. *The Institutional Research about National Quality Certification System*. Haerbing, China: Master Thesis in Haerbing University.
- Sun, X. and Yi, B., 2009. The analysis of lead-market enterprise in agricultural systematization in JiLin, China. *Journal of Business Situation*, pp. 77-83.
- Survey and Reviews, 2008. Coffee tinned drink with various flavour becomes popular in Young People, *Business Information*, pp. 7-12.
- Sydow, J. and Duschek, S., 2011. *Management interorganisationaler Beziehungen*. Stuttgart, Germany: Kohlhammer.
- Sylvander, B., 1995. Conventions de qualite et institutions: le cas des produits specifiques, In: E. Valceshini and F. Nicolas eds, 1995. *Agro-alimentaire: une economie de la qualite*. Paris, France: INRAEconomica.
- Tallontire, A., 2000. Partnerships in fair trade. *Development in Practice* 10 (2), pp. 166-177.

- The Guardian, 2007. McCoffees help fuel ethical trade boom. [online] Available at <<http://www.guardian.co.uk/business/2007/oct/05/ethicalbusiness.money>> [accessed on July, 30th 2012].
- Thomas, A., 1997. The climate of the Gongga Shan Range, Sichuan Province, PR China. *Arctic and Alpine Research* 29 (2), pp. 7-12.
- Thompson, J., 1967. *Organizations in Action*. New York, USA: McGraw-Hill.
- Treibel, A., 2011. *Migration in modernen Gesellschaften*. Weinheim und München, Germany: Juventa, 39-45.
- Tuomella-Millan, P., 2009. *Fair trade between Uruguay and Finland*. [online] Thesis, Seinäjoki University of Applied Sciences, Finland. Available at <<https://publications.theseus.fi/bitstream/handle/10024/5676/Tuomela-Millan%20Patricia%20I.pdf?sequence=1>> [accessed on October, 23rd 2012] p. 32.
- United Nations Environment Programme (UNEP) and World Conservation Monitoring Centre (WCMC), 2011. [pdf] Cambridge, UK. Available at <<http://www.unep-wcmc.org/medialibrary/2011/06/24/087684e3/Three%20Rivers%20Yunnan.pdf>> [accessed on October, 23rd 2012].
- Utting-Chamorro, K., 2005. Does fair trade make a difference? *Development in Practice* 15 (3) & (4), pp. 584-599.
- Valceschini, E. and Nicolas, F., 1995. La dynamique economique de la qualite agro-alimentaire. In: E. Valceshini and F. Nicolas, eds. 1995. *Agro-alimentaire: une economie de la qualite*. Paris, France: INRAEconomica.
- VanderHoff Boersma, F., 2003. *Poverty alleviation through participation in Fair Trade coffee networks: the case of UCIRI*. New York, Ford Foundation [pdf] Available at <<http://are.berkeley.edu/courses/EEP131/fall2007/Fairtrade/Raynolds.pdf>> [accessed on December, 28th 2013].
- Walter-Busch, E., 1996. *Organisationstheorien von Weber bis Weick*. Amsterdam, Netherlands: Falkutas.
- Wan, P., 2006. Standardization development of farmers' cooperative. *Management and Administration on Rural Cooperative* 11, pp. 18-22.
- Wang, C., Xiong, P., Zhang, H. and Zhang L., 2009. International industrial shift. *West Forum* 1, pp. 57-59.
- Wang, G., 2006. *Chinese rural transference research for the maximization of farmers' net income*. Beijing, China: Economy Science Press, pp. 212-215.
- Wang, H., 2010. Defining the Chinese Middle Class. *Forbes* [online] 24 November. Available at <<http://www.forbes.com/sites/helenwang/2010/11/24/defining-the-chinese-middle-class/>> [accessed on May, 9th 2012].

- Wang, K., 2005. Chinese rural collective land capitalization operation and the construction of social security mechanism research. *Shanghai Finance and Economics University Press* 13, pp. 136-139.
- Wang, M., 2005. Farmer migration research in new times. *Journal of Linyi University* 1, pp. 127-130.
- Wang, X. and Chen, P., 2009. The report about land transference in Henan Xingyang. *China Economic Weekly* 16, pp. 24-28.
- Wang, X. and Li, Y., 2009. Nestlé Win-win situation with coffee farmers. *WTO Economic Guide* 5, pp. 47-51.
- Wang, Y., 2006. The problems of certification reduce public confidence. *China Youth Daily*, [online] 11 August. Available at <http://zqb.cyol.com/content/2006-08/14/content_1477136.htm> [accessed on January, 4th 2013].
- Wang, Y., 2010. Chinese Enterprises and Investors Bet on Chinese Coffee Market. *Global Entrepreneur*. [online] 21 July. Available at <<http://news.hexun.com/2010-07-21/124323507.html>> [accessed on May, 12th 2012].
- Wang, Z., 2012. Chinese coffee shops report. Abang Coffee Net [online] Available at <<http://coffee.abang.com/od/coffeestory/a/lishi.htm>> [accessed on January, 1st 2013].
- Watts, M. and Goodman, D., 1997. Agrarian questions: global appetite, local metabolism: nature, culture, and industry in fin-de-siecle agro-food systems. In: D. Goodman and M. Watts, eds. 1997. *Globalizing Food Agrarian Questions and Global Restructuring*. London, UK: Routledge.
- Wen, T., 2000. Chinese urbanization pathway and relevant institutional problems. *China Opening Herald* 5, pp. 21-23.
- White M., 2012. Starbucks Plans ‘Venti’ Expansion into China. [online] Available at <http://bottomline.msnbc.msn.com/_news/2012/04/02/10985348-starbucks-plans-venti-expansion-into-china?lite> [accessed on May, 11th 2012].
- Williamson, O.E., 1979. Transaction-cost economics: The governance of contractual relations. *Journal of law and economics* 22 (2), pp. 233-261.
- Wollni, M. and Zeller, M., 2006. *Do farmers benefit from participating in specialty markets and cooperatives?* [pdf] University of Göttingen and University of Hohenheim, Germany. Available at <<http://ageconsearch.umn.edu/bitstream/25670/1/cp061062.pdf>> [accessed on August, 23rd 2013].
- Wong, C.P.W., 1991. Central-local relations in an era of fiscal decline: the paradox of fiscal decentralization in Post-Mao China. *The China Quarterly*, 128 pp. 691-701.

- Woolcock, M. and Narayan, D., 2000. Social Capital: Implications for Development Theory, Research, and Policy. *World Bank Research Observer*, 15 (2), pp. 225-249.
- Workers' Daily, 2012. Five innovations to improve the public confidence of certification. *Workers' Daily* [online] January 13th 2012. Available at <http://media.worker.cn/grrb/2012_01/13/GR0404.htm> [accessed on January, 4th 2013].
- World Bank, 2004. Absolute poverty measures for the developing world. [pdf] Washington DC, USA: World Bank Policy Research Working Paper 4211. Available at <http://www-wds.worldbank.org/servlet/WDSContentServer/WDSP/IB/2007/04/16/000016406_20070416104010/Rendered/PDF/wps4211.pdf> [accessed on October, 18th 2012]
- Worldshops, 2012. [online] Available at <<http://worldshops.tumblr.com/>> [accessed on May, 21st 2012].
- Wrigley, G., 1988. *Coffee*. Harlow, UK: Longman Scientific & Technical.
- Wu, B., 2009. Work Statement of China National People Congress Committee. [online] Beijing, China, National People's Congress. Available at <<http://gb.cri.cn/27824/2009/03/09/107s2452091.htm>> [accessed on April, 21st 2012].
- Wu, C., 2008. *Fairtrade Social forum*. Social Resource Institute [online] Available at <http://www.syntao.com/PageDetail.asp?Page_ID=9342> [accessed on August, 4th 2012].
- Wu, P. and Zhao, L., 2010. *Food laws, regulations and rules*. Beijing, China: Chemical Industry Press.
- Wu, Y., Zheng, X., Gao, Y., 2008. The function of local government in the development of farmers' cooperative. *Friends of Farmers' Development*, 2, pp. 38-44.
- Xia, Y., 2008. Governmental actions and relevant policies in the development process of China farmers' cooperative. *Management and Administration on Rural Cooperative* 11, pp. 17-21.
- Xie, R., 2011. The research about preferential policies for farmers' cooperative development in Guangdong province. *Lingnan Scientific Journal* 4, pp. 102-105.
- Xinhua News Agency, 2009. *Sanlu polluted milk powder scandal*. Xinhua News [online] April 1st 2009. Available at <<http://news.sina.com.cn/c/2009-01-04/084916973100.shtml>> [accessed on January, 4th 2012].
- Xiong, Q. and Zhu, M., 2006. *FCCD nature reserve program report*. Beijing, China: Science Press.
- Xiong, W. , 2008. The meaning of sustainable institution for natural village governance. [online] *Chinese Rural Discovery Journal*. Available at <http://www.zgxcfx.com/Article_Show.asp?ArticleID=9804> [accessed on May, 28th 2008]

- Xiong, X., 2007a. *Investment Times*. [online] 19 July. Available at <http://www.tianjinwe.com/rollnews/201207/t20120719_6065326.html> [accessed on January, 1st 2012].
- Xiong, X., 2007b. *The research about certification system*. ChongQing, China: Master Thesis of ChongQing University.
- Xu, Y., 2008. The research about rural migrant labours from the perspective of new socialist countryside. *Henan Social Sciences*, 4, pp. 73-77.
- Yang, H., 2009. China mulls urbanization of 140 million migrant workers. *China Daily* [online] 09 July. Available at <http://www.chinadaily.com.cn/business/2009-07/09/content_8402814.htm> [accessed on April, 25th 2012].
- Yang, Y., 2000. Urbanization benefits the creation of employment opportunity. *Economic Forum* 5, pp. 6-11.
- Yang, Z., 2010. *State council's work statement about the transference of rural labour and the interest protection of immigrant workers*. [online] Beijing, China, Standing Committee of NPC. Available at <http://www.zhanjiang.gov.cn/_layouts/ApplicationPages/Modules/News/ZWGKDetail.aspx?id=c462e8b4-4050-40a8-b1a0-ef6eba9f716b> [accessed on May, 7th 2012].
- Yi, H., 2004. The innovation of Dongbei industrial bases and the transference of rural surplus labours. *Northeast Asian Forum* 2, pp. 18-23.
- Yunnan Baoshan Government, 2007. The opinions about sugar cane industry in Baoshan. Available at <<http://www.baoshan.gov.cn/xxgk/zcfg/2041783895712630482>> [accessed on June, 6th 2013].
- Yunnan Baoshan Government, 2008. The opinions about the rapid growth of farmers' cooperative. [online] Available at <<http://www.caein.com/index.asp?xAction=xReadNews&NewsID=40629>> [accessed on December, 14th 2012].
- Yunnan Dehong Government, 2012. The local news about coffee festival. [online] Available at <<http://www.dehong.gov.cn/news/dhnews/2012/1208/news-76780.html>> [accessed on December, 14th 2012].
- Yunnan Government, 1999. Yunnan village election regulation. [online] Available at <http://www.34law.com/lawfg/law/1797/2820/law_2517343838.shtml> [accessed on July, 8th 2013].
- Yunnan Government, 2012. The evaluation standards about Yunnan farmers' cooperatives. [online] Available at <http://www.ynf.gov.cn/ynczt_model/article.aspx?id=1832858> [accessed on December, 14th 2012].
- Yunnan Government, 2013. The promotion of village electric network project in Yunnan [online] Available at <<http://news.sina.com.cn/c/295415.html>> [accessed on July, 19th 2013].

- Yu, L., Zheng, S., Luo, B., Xiu, G. 2010. Major problems and solutions of farmer cooperative's development. *Journal of Inquiry into Economic Issues* 9, pp. 63-69.
- Yunnan Coffee Guild, 2012. *Coffee alliance purchase proposal*. [online] Available at <http://www.gov.cn/gzdt/2012-04/13/content_2112558.htm> [accessed on May, 12th 2012].
- Yunnan Coffee Organization, 2012. Interview about the Reduction of Coffee Price in Yunnan. *China Economic Times*, [online] 17 April. Available at <<http://roll.sohu.com/20120417/n340772829.shtml>> [accessed on May, 12th 2012].
- Yunnan Development and Reform Commission (YDRC) & Ministry of Agriculture & Yunnan Academy of Agricultural Sciences, 2011. *Plan for the Development of the Coffee Industry in Yunnan*. [online] Available at <<http://www.yaas.org.cn/Article/ShowArticle.asp?ArticleID=12457>> [accessed on May, 12th 2012].
- Yunnan Management Bureau, 2011. [online] Available at <http://special.yunnan.cn/feature3/html/2011-05/23/content_1627008.htm> [accessed on October, 23rd 2012].
- Zhang, J., 2011. *Taiyuan is not well developed due to the lack of Starbucks*. *Sohu News*, [online] 8 December. Available at <<http://news.sohu.com/20111208/n328376197.shtml>> [accessed on May, 11th 2012].
- Zhang, K., 1988. The climatic dividing line between SW and SE monsoons and their differences. *Climatological Notes* 38, pp. 1988-1991.
- Zhang, L., 2005. *The Institutional Research about Communist Commune*. Shanghai, China: Shanghai People Press.
- Zhang, Q. and Donaldson J., 2008. The rise of agrarian capitalism with Chinese characteristics. *The China Journal* 60, pp. 24-47.
- Zhang, S. and Wang, Z., 2007. The property institution of farmers' cooperative in China. *Journal of Anhui Agricultural Science* 36, pp. 12114-12118.
- Zhang, X., 2000. The problems between farmers' income and rural surplus labours. *Problems of Agricultural Economy* 6, pp. 2-9.
- Zhang, X., 2012. *The introduction of coffee varieties from Starbucks*. Yunnan Agricultural Academy. [online] Available at <<http://www.yaas.org.cn/Article/ShowArticle.asp?ArticleID=15263>> [accessed on May, 12th 2012].
- Zhang, Y. and Liu, X., 2007. The role of social adjustment and control in the minority society. *Thinking Front Journal* 33 (6), pp. 20-27.
- Zhang, Z. and Tan, X., 1998. Small town cannot play an important role in the urbanization process. *China Soft Science* 8, pp. 14-16.
- Zhao, D., 1999. Increase domestic demand and explore rural market. *Management and Administration of Rural Cooperative Economy Journal* 9, pp. 12-17.

- Zhao, W., 1994. The research about farmers' systematization level since economic reform. *Social Science Research* 2, pp. 70-75.
- Zhou, Q., 1997. Chance and ability. *Management World* 5, pp. 100-108.
- Zhou, Y., 2006. To improve the public confidence, the release of certification and accreditation law. *Forum for Advancement* 9, pp. 1-12.
- Zotter chocolate company, 2012. *The secret of Zotter chocolate*. [online] Available at <<http://www.zotterchocolate.co.uk/>> [accessed on July, 30th 2012].
- Zucker, L. G., 1986. Production of trust: Institutional sources of economic structure 1840-1920. *Research in Organizational Behavior* 8, pp. 53-111.
- Zweig, D., 1997. *Freeing China's Farmers: Rural Restructuring in the Reform Era*. New York, USA: M. E. Sharpe.

Appendix

Interview list

Number	Time	Location	Interviewer	Interviewee
1	03/11/2009	Dayutang production group	Lu Chen	Group head
2	03/11/2009	Dayutang production group	Lu Chen	Vice village leader
3	03/11/2009	Dayutang production group	Lu Chen	Middle-age villager
4	03/11/2009	Dayutang production group	Lu Chen	Villagers
5	03/11/2009	Dayutang production group	Lu Chen	Coffee institute researchers
6	03/11/2009	Dayutang production group	Lu Chen	Young villager
7	04/11/2009	Manggang production group	Lu Chen	Villagers
8	04/11/2009	Manggang production group	Lu Chen	Villager representatives
9	04/11/2009	Manggang production group	Shigui Yang	Villagers
10	04/11/2009	Manggang production group	Lu Chen	Family head
11	04/11/2009	Manggang production group	Shigui Yang	Female villager
12	05/11/2009	Manggang production group	Shigui Yang	Old villagers
13	05/11/2009	Manggang production group	Xiaosong Gao	Young villagers
14	05/11/2009	Manggang production group	Lu Chen	Pastor
15	05/11/2009	Manggang production group	Lu Chen	Family head
16	05/11/2009	Manggang production group	Xiaosong Gao	Senior members
17	06/11/2009	Manggang production group	Shigui Yang	Senior members
18	06/11/2009	Manggang production group	Lu Chen	Senior members
19	06/11/2009	Manggang production group	Xiaosong Gao	Senior members
20	06/11/2009	Manggang production group	Shigui Yang	Family heads
21	06/11/2009	Manggang production group	Lu Chen	Village head
22	06/11/2009	Manggang production group	Lu Chen	Formal village head

Number	Time	Location	Interviewer	Interviewee
23	06/11/2009	Manggang production group	Xiaosong Gao	Young villagers
24	07/11/2009	Manggang production group	Shigui Yang	Villagers
25	07/11/2009	Manggang production group	Lu Chen	The first chairman of farmers' conservation associaiton
26	07/11/2009	Manggang production group	Lu Chen	Young female villagers
27	07/11/2009	Manggang production group	Shigui Yang	Family heads
28	07/11/2009	Manggang production group	Lu Chen	Villagers
29	07/11/2009	Manggang production group	Lu Chen	Old female villagers
30	07/11/2009	Manggang production group	Lu Chen	Middle-aged villagers
31	08/11/2009	Manggang production group	Lu Chen	The vice leader of senior association
32	08/11/2009	Manggang production group	Lu Chen	The accountant of senior association
33	08/11/2009	Manggang production group	Lu Chen	Senior villagers
34	08/11/2009	Manggang production group	Lu Chen	Family heads
35	03/03/2013	Manggang production group	Lu Chen	Village head
36	03/03/2013	Manggang production group	Lu Chen	Group head
37	03/03/2013	Manggang production group	Lu Chen	Villager representatives
38	03/03/2013	Manggang production group	Lu Chen	Old villagers
39	03/03/2013	Manggang production group	Lu Chen	Family heads
40	04/03/2013	Manggang production group	Lu Chen	Family heads
41	04/03/2013	Manggang production group	Lu Chen	Young villagers
42	04/03/2013	Manggang production group	Lu Chen	Group head
43	16/10/2009	Agricultural Bureau of Yunnan Province	Lu Chen	The officers
44	03/06/2010	Coffee Shop	Lu Chen	Jürgen Piechaczek
45	11/07/2012	Coffee Shop	Lu Chen	Jürgen Piechaczek
46	07/10/2009	FLO	Lu Chen	Rüdiger Meyer

Questionnaire

1. Gender: Male Female

2. Age:

3. In the harvest season, do you help your neighbors when they can't handle their work?

No () 1

Probably not () 2

Sometimes () 3

Often () 4

Yes () 5

4. If you have to go away suddenly, who can you count on to take care of your children? (Record from the highest three possibilities in sequence.)

1	2	3

Other family member

Neighbor

Member of production group

Member of the village

Head of production group

Head of village Christian

Whoever I see

Other (please specify)

5. Would you borrow him money, if he asks you? (Record from the highest three possibilities in sequence.)

1	2	3

Other family member

Neighbor

Member of production group

Member of the village

Head of production group

Head of village Christian

Whoever I see

Other (please specify)

6. Suppose you have to go away for a while. Who would you trust to take care of your property/fields? (Record from the highest three possibilities in sequence.)

1	2	3

Other family member

Neighbor

Member of production group

Member of the village

Head of production group

Head of village Christian

Whoever I see

Other (please specify)

7. Do you take part in any organizations?

	No	Sometimes	Always
Women association			
Religious organization			
Senior association			
Youth association			
Environmental protection organization			
Labor exchange			
Money Pooling			
Political organization			
Others			

8. Do you join the meetings of the production group?

No () 1

Sometimes () 2

Always () 3

9. Who is in charge in the family?

The elders () 1

Husband () 2

Wife () 3

Justifiable person's opinion () 4

Other (specify please) () 5

10. How would you describe the relationship with your neighbors in the last few years?

Bad () 1

Not so good () 2

Average () 3

Good () 4

Very good () 5

11. Please tell me in general whether you agree or disagree with the following statements:

Strongly disagree, Disagree, Difficult to say, Agree, Strongly agree

	Honesty	Reliability	Concern
Persons in the clan			
Persons in the production group			
Persons in the administrative village			
Relative			
Neighbors			
Friends			

12. How likely will you return a runaway cow to a village member?

- Not likely at all () 1
 Not likely () 2
 Possible () 3
 Likely () 4
 Extremely likely () 5

13. Do you contribute time and money to festivals, activities and events of the production group?

- No () 1
 Probably not () 2
 Difficult to say () 3
 Normally yes () 4
 Yes () 5

14. Do you know about the private life of other families in the production group?

- No () 1
 I can get information,
 if I want to () 2
 Yes () 3

15. Do you care about others' opinions about you and discussions about you?

- No () 1
 Not really () 2
 Average () 3
 Much () 4
 Very much () 5

16. How many persons like to take advantage of others?

	Many	Relatively Many	Some	A Few	Few
In the administrative village					
In the nature village					
In the family					

17. Suppose you face the following choices, which one would you prefer?

To own 1 hectares of land and work only with your family () 1

To own 2,5 hectares of land and work jointly with one other family () 2

18. If you have troubles, will someone be there to help you?

	No	Mostly not	Sometimes	Mostly yes	Yes
In the administrative village					
In the production group					
In the clan					
Friends					
Relatives					
Neighbours					

19. If you need help, will members of the production group help you?

No () 1

Mostly not () 2

Sometimes () 3

Mostly yes () 4

Yes () 5

20. If you are in trouble, who will the first to help you? (Record from the highest three possibilities in sequence.)

1	2	3

Other family member

Neighbor

Member of production group

Member of the village

Head of production group

Head of village Christian

Whoever I see

Other (please specify)

The Interview Questions

21. How many occupations do you have? What are they? Since when?

22. Where are you born? Are you married?

23. How many members in your family?

24. How old are they?

25. Are you Han Chinese?

26. What is your religion? What do your relatives believe in?

27. How about the ownership of land? Collective or national?
28. If the land is collective, which one does it belong to? Administrative village, production group or others?
29. How about the management and use right? Who has them? Since when?
30. How can you obtain your land? How large?
31. How to inherit the land? Does the land have to be returned to official collective owner? Or redistributed in the family?
32. What is the usage of your land? For coffee plantation or other varieties?
33. How large is your forest land? How about the cultivation land? All hillside?
34. Is the land fertile? If not, how to handle it?
35. How about irrigation system? Who builds it? When?
36. Do you plant coffee trees? If yes, how large is your plantation?
37. Do you plant other varieties? Where?
38. Is coffee plantation profitable? Are you satisfied with it?
39. How about the cost? How much and what they are?
40. Do you have coffee pulper and other machines? Where they are made? Baoshan?
41. Is the purchase price high? Can you afford?
42. Are they difficult to be repaired? Does every family have a pulper? If you do not have, can you borrow one? How much you have to pay for it?
43. When and where do you sell your coffee beans?
44. Who are the buyers? Where do they come? Always the same ones?
45. How has been the coffee price since last 3 years? Are you satisfied with it?
46. Do you have an expected price for coffee beans? How much?
47. If the price is declined, do you have a minimum price? How much?
48. If the coffee trees suffer from disease and insects, who is in charge to solve the problems?
49. What is your plan to continually improve your income?
50. How is the economic gap between richer and poorer groups? Do the richer farmers have more power in the village?
51. Do farmers in the village buy goods with money or barter with their own goods?
52. How is the local security? Criminal? Fight? Frequency?
53. Conflicts among neighbors? Among production groups?
54. Who is judger or solver? Go to court?
55. What are the reasons?
56. Is there any collective affray in the history? If yes, what is the cause?
57. How is the traffic situation? Has the countryside roads been improved since the last 5 years?
58. Who built the road? When?
59. How to raise the money for it?
60. How about electricity utility network and tap water system? Since when do you have them?
61. Who made the decision? Let us talk about it (performance, sanction).
62. Is there a post office in the village? If no, does postman come to village regularly?
63. What are the normal building materials of houses in the village? Is housing problem serious in the village?
64. How many primary schools are in the village? How about other schools? How far away?
65. Is the fee of school expensive? Other fees?

66. Who or which institution is responsible for the education in the village?
67. How many teachers and students in the village?
68. How many persons are in the production group? How large is a production group?
69. How often are the meetings of production group held?
70. How many persons will join the meeting? Can all villagers join? Delegates?
71. What kind of topic was discussed in the meeting?
72. Who suggest them? How to make a decision? Can you explain a little more?
73. Do farmers comply with the decisions? If they don't, is there any punishment imposed on them or their families?
74. What is the procedure of the meeting?
75. Is there any meeting subsidy for each participator? How much, if yes?
76. If a single farmer wants to convene a meeting, will it be held? Do you have such an experience? If yes, what was the issue?
77. Is there an election for the head of production group? Could you explain the election process?
78. How long is the term for the head of production group?
79. Is there any female heads of production group? Gender distribution?
80. Is there an executive board in the production group? If yes, how many male and female members? What are their average ages?
81. What is the function of the board? Are they elected?
82. How about the senior association? Can you talk about it?
83. How many members?
84. Since when is has been formed? Reasons?
85. Do you know the farmers biodiversity protection association?
86. How many members? Are you a member of it?
87. Can you tell me its history, activities and selection?
88. How long and why is the biodiversity protection association established?
89. What are the programs organized by association?
90. Is it still active? Influence?
91. How many forest protection supervisors in the village? Do they earn salary? If yes, how much? Which organization or institution pays for it?
92. Do you still pay the forest protection fee? If yes, how much is it?
93. Is there any rule or custom on the record in the village? If no, is there any rule currently complied in the village?
94. Does villager respect and comply with the rules?
95. Do you know your neighbor well? All of them?
96. How to get the information?
97. Do all your friends come from the production group?
98. What is your entertainment program at night?
99. Did you borrow money before? For what? From whom? How much?
100. How can you get your credit? From whom?
101. Is there a private financial group?
102. Is it difficult to get credit from bank? Any collateral requirement? Interest?
103. Why they want to borrow money? Reason?
104. Is there mutual aid activity in the village? If yes, for what? When?
105. Is there any daily labor in the village? How about the temporary labor from other village?
106. Where do they come from? When do they come? What kind of jobs they do?

107. Do they live in the village? How many are they?
108. If you want to hire one, where and how you can find?
109. Do you offer food and lodging for them?
110. Is there any migration in the production group? Move in or out? How many? Why?
111. Does local farmer work outside of the production group? If yes, where they will go? How many are they? Gender and age?
112. Who is usually in charge of the family? How is female status in the family?
113. Can you talk about the celebrations in the village? How about wedding?
114. How long it takes? How many guests? How to organize it? Who is in charge of it?
115. Is funeral difficult to organize? What is difference funeral and wedding from the perspective of management?
116. How about the inauguration ceremony for new house?